





State of Ohio Environmental Protection Agency

P.O. Box 1049, 1800 WaterMark Dr.  
Columbus, Ohio 43266-0149  
14) 644-3020  
AX (614) 644-2329

George V. Voinovich  
Governor

June 27, 1994

Re: Completion of Partial  
Closure Plan  
U.S. EPA ID No.  
OHD004304689

PPG Industries, Inc.  
Attn: Mr. Bryant Riley  
559 Pittsburgh Road  
Circleville, Ohio 43113

Dear Mr. Riley:

According to Ohio EPA records, on June 11, 1993, the Director of Ohio EPA approved a closure plan submitted by PPG Industries, Inc. for the hazardous waste liquid waste incinerator, the west storage pad, the south storage pad, and the still pad at the PPG Industries, Inc. facility in Circleville, Ohio. On January 3, 1994, PPG Industries, Inc. submitted to the Director certification documents stating that the hazardous waste units indicated above had been closed according to the specifications in the approved closure plan. Ohio EPA District Office personnel completed a certification of closure inspection and a review of documents pertaining to the four hazardous waste units on January 31, 1994.

Based on this inspection and review, the Ohio EPA has determined that the hazardous waste liquid waste incinerator, the west storage pad, the south storage pad, and the still pad have been closed in accordance with the approved closure plan and Rules 3745-66-12 through 3745-66-15 of the Ohio Administrative Code (OAC). PPG Industries, Inc. in Circleville, Ohio will continue to operate as a treatment, storage, and disposal facility (TSDF).

Please contact the Ohio EPA, Central District Office, Attn: Jeff Reynolds, P.O. Box 2198, 2305 Westbrook Drive, Bldg. C, Columbus, Ohio 43266-2198, tel: (614) 771-7505 if you have any questions concerning the closure process or the facility's status.

Sincerely yours,

Thomas E. Crepeau, Manager  
Data Management Section  
Division of Hazardous Waste Management

cc: Harriet Croke, U.S. EPA, Region 5  
Ed Kitchen, DHWM  
Jeff Reynolds, CDO



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PPG Industries, Inc. P.O. Box 457 Circleville, Ohio 43113

Coatings and Resins

June 25, 1993

Mr. Donald R. Schregardus, Director  
Ohio Environmental Protection Agency  
P.O. Box 1049, 1800 Watermark Drive  
Columbus, Ohio 43266-0149

RECEIVED  
JUL 21 1993

OFFICE OF RCRA  
WASTE MANAGEMENT DIV  
EPA, REGION 5

Subject: PPG Industries, Inc.  
Circleville, Ohio  
OHD004304689  
Amended Partial Closure Plan

Dear Mr. Schregardus:

This letter is submitted in response to your letter of June 11, 1993 approving the amended Partial Closure Plan for four interim status hazardous waste management units at this facility subject to several modifications. This letter and attached documents provide the deliverables to address the modifications in order to finalize the Partial Closure Plan.

Following the Stipulation and Settlement Agreement of March 8, 1993, PPG Industries proceeded with additional soil sampling in order to address two issues: To fully define the extent of contamination as described in Section 11 of the Plan, and to perform TCLP analyses in accordance with the first modification in the letter of approval. PPG notified Ohio EPA Central District Office personnel prior to the sampling event which occurred on March 24, 1993.

Attachment A to this letter presents a summary of the soil sampling. The results revealed no detectable concentrations of the constituent of concern (methylene chloride) at depths sampled to define vertical extent of contamination. Therefore PPG asserts that the horizontal and vertical extent of contamination from the units being closed has now been fully defined. Additionally, none of the constituents of concern were detected in leachate samples derived from TCLP extraction of soil samples collected from grid locations where highest concentrations of these constituents had been previously identified. Therefore, pertinent to Modification 1, no amendment to the Plan will be required.

Modifications 2 and 3 in your approval letter require several changes to the risk assessment portion of the Partial Closure Plan (Attachment E). We have enclosed a complete revised Partial Closure Plan (Revision 3) that includes the modifications to the risk assessment. You should also note that as a result of completing the TCLP analysis, the portions of the risk assessment relating to the groundwater exposure pathway have been removed since the data show no detectable concentrations of constituents of concern were identified in TCLP leachate samples. All references to the groundwater exposure pathway in the main text of the closure plan have also been removed.

In addition to the risk assessment modifications, the following modifications to the Partial Closure Plan were included in the Revision 3 document:

- The shading and italics provided in Revision 2 for facilitating agency review have been eliminated. Page iv of the plan has been modified to remove the reference to the highlighting.
- Page v: The last paragraph of this page was modified to include a reference to OAC 3745-66-15.
- Page 6-3: The chronology of events related to the partial closure was expanded to describe activities occurring since the submittal of the Revision 2 document.
- Page 9-1: The first paragraph of this page was modified to reflect the most recent round of soil sampling (conducted March 24, 1993).
- Page 10-3: Grid Location 71 was changed to 76 to correct a typographical error.
- Page 10-3: Section 10.6 was modified to remove discussion on the groundwater exposure pathway.
- Page 11-1: The third paragraph of this page was modified to reference the most recent soil sampling (conducted March 24, 1993).
- Page 11-2: Section 11.1 was revised to reflect that the soil samples collected on 3/24/93 from Grid Locations 24 and 45 defined the vertical extent of contamination.
- Page 11-3: Section 11.3 was modified to reflect that the soil sampling conducted on 3/24/93 from Grid Location 100 defined the vertical extent of contamination.
- Attachment A: Page 3 was modified to change S-71 to S-76 to correct a typographical error.
- Attachment B: Page 1 was modified to change S-71 to S-76 to correct a typographical error.
- Attachment C: The first paragraph was modified to correct the sample numbers to CV-92-350-S79.
- Attachment E: Page 2-1 of the Attachment was modified to add Decanter Waste (D001, D002, D035) to be consistent with the main text of the Partial Closure Plan.
- Attachment E: Page 5 and Page 11 of Appendix A to Attachment E were modified to change S-71 to S-76 to correct a typographical error.

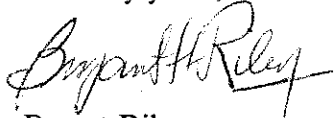


Mr. Donald R. Schregardus  
Ohio EPA  
Page 3

These noted modifications are considered minor and should not require OEPA review and comment. Subject to your confirmation that PPG has met the requirements of your letter of approval, formal certification by both PPG and an independent, registered professional engineer that closure has been completed in accordance with the approved Partial Closure Plan will be submitted to Ohio EPA within 60 days as required by OAC 3745-66-15.

Please contact me at (614) 474-3161 Ext. 219 if there are any questions or comments.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Bryant Riley", with a stylized flourish at the end.

Bryant Riley  
Environmental Engineer

BR/kp

cc: Mr. Brad Campbell - OEPA - CDO  
Mr. Lundy Adelsberger - OEPA - CDO  
Ms. Sandy Liebfriz - OEPA - CO  
Mr. Mike Galbraith, USEPA Region V  
Mr. Charles Waterman - Bricker and Eckler  
Mr. Robert Bear - ICF Kaiser  
Ms. Marian Broz - Allison Park



PPG Industries, Inc.  
Post Office Box 457 Circleville, Ohio 43113 USA

Coatings and Resins

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JUN 10 1993

OFFICE OF RCRA  
WASTE MANAGEMENT DIV.  
EPA REGION

June 8, 1993

Attention: Mr. Mike Galbraith  
Mail Distribution Code: HRP-8J  
USEPA Region V  
77 West Jackson Blvd.  
Chicago, IL 60604

Dear Mr. Galbraith:

Enclosed is a photocopy you requested of the Partial Closure Plan submitted on February 18, 1993 by PPG Industries, Circleville, Ohio, to the Ohio EPA. Also I have included a subsequent letter regarding correction of a sampling grid location number in this Plan.

As I mentioned in our telephone conversation, we anticipate submitting a revision of this Plan which will include corrections to the risk assessment tables and data and revisions resulting from additional soil sampling. We will forward a bound copy to your office.

If there are any further questions regarding this matter, please call me at (614) 474-3161 Ext 219.

Sincerely yours,

Bryant Riley

cc: Marian Broz, PPG A/P  
Robert Bear, ICF Kaiser Engineers  
File 410



PPG Industries, Inc.  
Post Office Box 457 Circleville, Ohio 43113 USA

Coatings and Resins

April 2, 1993

Mr. Donald R. Schregardus, Director  
Ohio Environmental Protection Agency  
P.O. Box 1049, 1800 Watermark Drive  
Columbus, Ohio 43266-0149

Re: PPG Industries, Inc.  
OHD004304689  
Ammended Partial Closure Plan

Dear Mr. Schregardus:

PPG Industries submits the following corrections to its Partial Closure Plan that was submitted on February 18, 1993:

Page 10-3, second paragraph, "Grid Location Number 71" is changed to "Grid Location Number 76".

Attachment A, Page 3, fifth item, Location # is changed from S-71 to S-76.

Attachment B, Page 1, seventeenth item, Location # is changed from S-71 to S-76.

Attachment E, Appendix A Data Summary, Page 5, seventh item, Location # is changed from S-71 to S-76.

Attachment E, Appendix A Data Summary, Page 11, seventeenth item, Location # is changed from S-71 to S-76.

Copies of these pages as corrected are attached. All of these corrections pertain to one issue: a typographical error that occurred in a version of the Partial Closure Plan submitted in January 1991 has been repeated in subsequent versions and was not discovered until now.

For the purposes of documentation that the correct soil sampling grid number is actually S-76 rather than S-71, the analytical report from our original 1989 sampling data for

location S-76 is attached. This shows that the concentration of detected constituents from grid S-76 to be identical to those previously shown for S-71 in the Summary Table which is now being corrected. Grid S-71 never was included in the soil sampling program since it was not selected by the random number generator in the original Closure Plan.

As indicated by the correction made on page 10-3, this change affects the grids selected for soil sampling to be performed for TCLP analysis. Since the goal is to select grids from which previous analyses indicated highest levels of detected compounds and to document that there is no potential for constituent migration to groundwater, correcting the location to S-76 is consistent with the corrected tables and text and the goal of the TCLP sampling.

If there are any questions regarding this matter, please call me at (614) 474-3161 Ext. 219.

Sincerely yours,

A handwritten signature in dark ink, appearing to read "Bryant Riley", with a stylized, cursive script.

Bryant Riley

cc: Mr. Brad Campbell, Ohio EPA CDO  
Mr. Lundy Adelsberger, Ohio EPA CDO  
Ms. Sandy Liebfritz, Ohio EPA Central Office  
Charles H. Waterman, Esq., Bricker and Eckler  
Ms. Marian Broz, PPG Allison Park Engineering  
Mr. Robert S. Bear, ICF Kaiser Engineers

## 10.6 Exposure Assessment

OEPA requires a future unrestricted land use scenario for RCRA closure risk assessments. This scenario was incorporated into this risk assessment, for both an adult and a child, using factors as required in the OEPA "Closure Plan Guidance Manual". The exposure pathways required by OEPA were evaluated quantitatively, as follows: ingestion of chemicals in soil, dermal contact with chemicals in soil, inhalation of chemicals associated with unit-originated airborne particulate matter, ingestion of chemicals in water, inhalation of chemicals volatilizing during showering, dermal contact with chemicals in water, and inhalation of chemical volatilizing from soil. Where specific approaches were not identified by OEPA, appropriate calculations were incorporated, complete with explanations of factors, equations and full literature citations.

*To document that there is no potential for constituent migration to groundwater, a total of four soil samples will be collected at a depth of 6"-12" below ground surface at Grid Location Numbers 24 and 45 at the Former Liquid Waste Incinerator and Grid Location Numbers 76 and 100 at the South Drum Storage Area and subjected to the TCLP leaching procedure. TCLP leachates produced will be analyzed for volatile organic constituents of concern (ethylbenzene, toluene, xylene and methylene chloride) using EPA SW 846 Method 8240.*

## 10.7 Risk Characterization

The results of the risk assessment are presented in the risk characterization section of Attachment E. Noncancer hazard indices, summed for all chemicals and all exposure pathways, and theoretical excess lifetime cancer risks, summed for all chemicals and all pathways in each unit are presented here. OEPA requires that summed non-cancer hazard values be less than one, and that summed theoretical excess lifetime cancer risks be less than one in one million, or  $1 \times 10^{-6}$ . The data indicate that these values are within the acceptable limits for each unit. These data are presented in Table 10-3.

## 10.8 Uncertainty Analysis

The uncertainty analysis section of Attachment E qualitatively describes the likelihood that the approaches incorporated into this assessment result in underestimates or overestimates of the risk conclusions. Regulatory risk assessment in general, as it is currently practiced, is highly conservative and often focused on an absolute worst case scenario. The Closure Plan Guidance required by OEPA extends beyond that recommended even by the USEPA in the "Risk Assessment Guidance for Superfund" and implements approaches which would not be reproducible in an actual situation. Thus, the risks documented in this report are far in excess of those which would be anticipated to actually occur. Details on the basis for these conclusions are presented in the risk assessment document.

## PPG-CIRCLEVILLE PARTIAL RCRA CLOSURE - ANALYTICAL RESULTS SUMMARY

Attachment A

SAMPLE #	LOC #	REPORT #	LAB#	LOCATION	DESCRIPTION	SAMPLE DATE	ANALYSIS FOR	RESULTS	UNITS	DETECTION LIMIT	COMMENTS
025	S-88	7137	JC5513	South Pad	Soil Sample	18-Jul-89 18-Jul-89 18-Jul-89 18-Jul-89	@ Right @ Right Meth. Chloride Toluene	BDL BDL 0.5 2	mg/kg mg/kg mg/kg mg/kg	0.999 Varies 0.3 0.3	Analysis for n-Butanol, isobutanol, and Methanol Analysis for HSL Volatiles all BDL, except below
026	S-82	7137	JC5514	South Pad	Soil Sample	18-Jul-89 18-Jul-89	@ Right @ Right	BDL BDL	mg/kg mg/kg	0.957 Varies	Analysis for n-Butanol, isobutanol, and Methanol Analysis for HSL Volatiles all BDL
C541	C541	7137	JC5541	South Pad	Soil Sample	18-Jul-89 18-Jul-89	@ Right Ardor 1254	BDL 0.334	mg/kg mg/kg	0.25 0.25	Analysis for 7 PCBs all BDL, except below
027	S-77	7137	JC5515	South Pad	Soil Sample	18-Jul-89 18-Jul-89 18-Jul-89	@ Right @ Right Meth. Chloride	BDL BDL 0.3	mg/kg mg/kg mg/kg	0.966 Varies 0.3	Analysis for n-Butanol, isobutanol, and Methanol Analysis for HSL Volatiles all BDL, except below
028	S-76	7137	JC5516	South Pad	Soil Sample	18-Jul-89 18-Jul-89 18-Jul-89 18-Jul-89 18-Jul-89	@ Right @ Right Ethylbenzene Toluene Xylenes	BDL BDL 0.3 17 0.16	mg/kg mg/kg mg/kg mg/kg mg/kg	0.993 Varies 0.3 0.3 0.3	Analysis for n-Butanol, isobutanol, and Methanol Analysis for HSL Volatiles all BDL, except below
029	S-72	7137	JC5517	South Pad	Soil Sample	18-Jul-89 18-Jul-89 18-Jul-89 18-Jul-89 18-Jul-89	@ Right @ Right Ethylbenzene Meth. Chloride Xylenes	BDL BDL 0.4 0.3 0.18	mg/kg mg/kg mg/kg mg/kg mg/kg	1.000 Varies 0.3 0.3 0.3	Analysis for n-Butanol, isobutanol, and Methanol Analysis for HSL Volatiles all BDL, except below
030	S-70	7137	JC5518	South Pad	Soil Sample	18-Jul-89 18-Jul-89	@ Right @ Right	BDL BDL	mg/kg mg/kg	0.960 Varies	Analysis for n-Butanol, isobutanol, and Methanol Analysis for HSL Volatiles all BDL
031	S-69	7137	JC5519	South Pad	Soil Sample	18-Jul-89 18-Jul-89 18-Jul-89 18-Jul-89 18-Jul-89 18-Jul-89	@ Right @ Right Ethylbenzene Meth. Chloride Toluene Xylenes	BDL BDL 0.3 3 1 1.8	mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	0.990 Varies 0.3 0.3 0.3 0.3	Analysis for n-Butanol, isobutanol, and Methanol Analysis for HSL Volatiles all BDL, except below
032	S-65	7137	JC5520	South Pad	Soil Sample	18-Jul-89 18-Jul-89 18-Jul-89	@ Right @ Right Meth. Chloride	BDL BDL 0.8	mg/kg mg/kg mg/kg	0.974 Varies 0.3	Analysis for n-Butanol, isobutanol, and Methanol Analysis for HSL Volatiles all BDL, except below
033	S-65	7137	JC5540	South Pad	Soil Sample (Dupl. S-55)	18-Jul-89 18-Jul-89 18-Jul-89	@ Right @ Right Meth. Chloride	BDL BDL 0.3	mg/kg mg/kg mg/kg	0.977 Varies 0.3	Analysis for n-Butanol, isobutanol, and Methanol Analysis for HSL Volatiles all BDL, except below
034	S-58	7137	JC5521	South Pad	Soil Sample	18-Jul-89 18-Jul-89 18-Jul-89 18-Jul-89	@ Right @ Right Meth. Chloride Toluene	BDL BDL 0.3 0.3	mg/kg mg/kg mg/kg mg/kg	0.962 Varies 0.3 0.3	Analysis for n-Butanol, isobutanol, and Methanol Analysis for HSL Volatiles all BDL, except below
035	S-61	7137	JC5522	South Pad	Soil Sample	18-Jul-89 18-Jul-89 18-Jul-89	@ Right @ Right Toluene	BDL BDL 0.3	mg/kg mg/kg mg/kg	0.976 Varies 0.3	Analysis for n-Butanol, isobutanol, and Methanol Analysis for HSL Volatiles all BDL, except below
036	S-49	7137	JC5523	South Pad	Soil Sample	18-Jul-89 18-Jul-89	@ Right @ Right	BDL BDL	mg/kg mg/kg	0.953 Varies	Analysis for n-Butanol, isobutanol, and Methanol Analysis for HSL Volatiles all BDL

SAMPLE #	LOC #	REPORT #	LAB#	LOCATION	DESCRIPTION	SAMPLE DATE	ANALYSIS FOR	RESULTS	UNITS	DETECTION LIMIT	COMMENTS
CV-89-0221	-	7137	CV-89-0221	STILL PAD	M.H. SEDIMENT SAMPLE	17-Apr-89 17-Apr-89 17-Apr-89 17-Apr-89	ETHYLBENZENE METH. CHLORIDE XYLENES AROCCLOR 1248	2.48 0.228 0.335 6,700	mg/kg mg/kg mg/kg mg/kg	0.167 0.167 0.167 1.0	
CV-89-0222	-	7137	CV-89-0222	STILL PAD	PIPE SEDIMENT SAMPLE	17-Apr-89 17-Apr-89 17-Apr-89	MEK XYLENES AROCCLOR 1248	15.3 167.5 41,400	mg/kg mg/kg mg/kg	4.00 4.00 1.0	
CV-89-0223	-	7137	CV-89-0223	STILL PAD	3rd RINSE	17-Apr-89 17-Apr-89	BUTYL CELLOSOLVE METH. CHLORIDE	85.4 169	mg/L ug/L	1.0 100	Initial run results shown, confirmed @ 84.1 mg/L
CV-89-0224	-	7137	CV-89-0224	STILL PAD	RINSEWATER SOURCE	17-Apr-89 17-Apr-89 17-Apr-89	METHANOL ACETONE METH. CHLORIDE	6.95 22.3 3.2	mg/L ug/L ug/L	1.0 10.0 2.0	
S-131	S-131	7137	S-131	SOUTH PAD	SOIL SAMPLE	18-Jul-89	TOLUENE	2	mg/kg	0.3	
004	S-135	7137	004	SOUTH PAD	SOIL SAMPLE	18-Jul-89	XYLENES	0.11	mg/kg	0.3	
005	S-136	7137	005	SOUTH PAD	SOIL SAMPLE	18-Jul-89	TOLUENE	0.8	mg/kg	0.3	
010	S-126	7137	010	SOUTH PAD	SOIL SAMPLE	18-Jul-89	TOLUENE	0.4	mg/kg	0.3	
013	S-107	7137	013	SOUTH PAD	SOIL SAMPLE	18-Jul-89 18-Jul-89	METH. CHLORIDE TOLUENE	0.3 0.4	mg/kg mg/kg	0.3 0.3	
015	S-109	7137	015	SOUTH PAD	SOIL SAMPLE (DUPL. S-109)	18-Jul-89	XYLENES	0.6	mg/kg	0.3	
018	S-112	7137	018	SOUTH PAD	SOIL SAMPLE	18-Jul-89	TOLUENE	0.4	mg/kg	0.3	
021	S-100	7137	021	SOUTH PAD	SOIL SAMPLE	18-Jul-89 18-Jul-89 18-Jul-89 18-Jul-89	ETHYLBENZENE METH. CHLORIDE TOLUENE XYLENES	2 0.3 21 8	mg/kg mg/kg mg/kg mg/kg	0.6 0.3 0.3 0.3	
024	S-80	7137	024	SOUTH PAD	SOIL SAMPLE	18-Jul-89	TOLUENE	0.5	mg/kg	0.3	
025	S-88	7137	025	SOUTH PAD	SOIL SAMPLE	18-Jul-89 18-Jul-89	METH. CHLORIDE TOLUENE	0.5 2	mg/kg mg/kg	0.3 0.3	
C541	C541	7137	JC6641	SOUTH PAD	SOIL SAMPLE	18-Jul-89	AROCCLOR 1254	0.334	mg/kg	0.25	
027	S-77	7137	027	SOUTH PAD	SOIL SAMPLE	18-Jul-89	METH. CHLORIDE	0.3	mg/kg	0.3	
028	S-76	7137	028	SOUTH PAD	SOIL SAMPLE	18-Jul-89 18-Jul-89 18-Jul-89	ETHYLBENZENE TOLUENE XYLENES	0.3 17 0.16	mg/kg mg/kg mg/kg	0.3 0.3 0.3	
029	S-72	7137	029	SOUTH PAD	SOIL SAMPLE	18-Jul-89 18-Jul-89 18-Jul-89	ETHYLBENZENE METH. CHLORIDE XYLENES	0.4 0.3 0.18	mg/kg mg/kg mg/kg	0.3 0.3 0.3	
031	S-69	7137	031	SOUTH PAD	SOIL SAMPLE	18-Jul-89 18-Jul-89 18-Jul-89 18-Jul-89	ETHYLBENZENE METH. CHLORIDE TOLUENE XYLENES	0.3 3 1 1.8	mg/kg mg/kg mg/kg mg/kg	0.3 0.3 0.3 0.3	



## CIRCLEVILLE, OHIO

JANUARY, 1991

SAMPLE #	LOC #	REPORT #	LAB#	LOCATION	DESCRIPTION	SAMPLE DATE	ANALYSIS FOR	RESULTS	UNITS	DETECTION LIMIT	COMMENTS
023	S-93	7137	JC5511	South Pad	Soil Sample	18-Jul-89 18-Jul-89	@ Right @ Right	BDL BDL	mg/kg mg/kg	0.988 Varies	Analysis for n-Butanol, isobutanol, and Methanol Analysis for HSL Volatiles all BDL
024	S-80	7137	JC5512	South Pad	Soil Sample	18-Jul-89 18-Jul-89 18-Jul-89	@ Right @ Right Toluene	BDL BDL 0.5	mg/kg mg/kg mg/kg	0.964 Varies 0.3	Analysis for n-Butanol, isobutanol, and Methanol Analysis for HSL Volatiles all BDL, except below
025	S-88	7137	JC5513	South Pad	Soil Sample	18-Jul-89 18-Jul-89 18-Jul-89 18-Jul-89	@ Right @ Right Meth. Chloride Toluene	BDL BDL 0.5 2	mg/kg mg/kg mg/kg mg/kg	0.999 Varies 0.3 0.3	Analysis for n-Butanol, isobutanol, and Methanol Analysis for HSL Volatiles all BDL, except below
026	S-82	7137	JC5514	South Pad	Soil Sample	18-Jul-89 18-Jul-89	@ Right @ Right	BDL BDL	mg/kg mg/kg	0.957 Varies	Analysis for n-Butanol, isobutanol, and Methanol Analysis for HSL Volatiles all BDL
C541	C541	7137	JC5541	South Pad	Soil Sample	18-Jul-89 18-Jul-89	@ Right Aroclor 1254	BDL 0.334	mg/kg mg/kg	0.25 0.25	Analysis for 7 PCBs all BDL, except below
027	S-77	7137	JC5515	South Pad	Soil Sample	18-Jul-89 18-Jul-89 18-Jul-89	@ Right @ Right Meth. Chloride	BDL BDL 0.3	mg/kg mg/kg mg/kg	0.966 Varies 0.3	Analysis for n-Butanol, isobutanol, and Methanol Analysis for HSL Volatiles all BDL, except below
028	S-76	7137	JC5516	South Pad	Soil Sample	18-Jul-89 18-Jul-89 18-Jul-89 18-Jul-89 18-Jul-89	@ Right @ Right Ethylbenzene Toluene Xylenes	BDL BDL 0.3 17 0.16	mg/kg mg/kg mg/kg mg/kg mg/kg	0.993 Varies 0.3 0.3 0.3	Analysis for n-Butanol, isobutanol, and Methanol Analysis for HSL Volatiles all BDL, except below
029	S-72	7137	JC5517	South Pad	Soil Sample	18-Jul-89 18-Jul-89 18-Jul-89 18-Jul-89 18-Jul-89	@ Right @ Right Ethylbenzene Meth. Chloride Xylenes	BDL BDL 0.4 0.3 0.18	mg/kg mg/kg mg/kg mg/kg mg/kg	1.000 Varies 0.3 0.3 0.3	Analysis for n-Butanol, isobutanol, and Methanol Analysis for HSL Volatiles all BDL, except below
030	S-70	7137	JC5518	South Pad	Soil Sample	18-Jul-89 18-Jul-89	@ Right @ Right	BDL BDL	mg/kg mg/kg	0.960 Varies	Analysis for n-Butanol, isobutanol, and Methanol Analysis for HSL Volatiles all BDL
031	S-69	7137	JC5519	South Pad	Soil Sample	18-Jul-89 18-Jul-89 18-Jul-89 18-Jul-89 18-Jul-89	@ Right @ Right Ethylbenzene Meth. Chloride Toluene Xylenes	BDL BDL 0.3 3 1 1.8	mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	0.990 Varies 0.3 0.3 0.3 0.3	Analysis for n-Butanol, isobutanol, and Methanol Analysis for HSL Volatiles all BDL, except below
032	S-65	7137	JC5520	South Pad	Soil Sample	18-Jul-89 18-Jul-89 18-Jul-89	@ Right @ Right Meth. Chloride	BDL BDL 0.8	mg/kg mg/kg mg/kg	0.974 Varies 0.3	Analysis for n-Butanol, isobutanol, and Methanol Analysis for HSL Volatiles all BDL, except below

JANUARY, 1991

SAMPLE #	LOC #	REPORT #	LAB#	LOCATION	DESCRIPTION	SAMPLE DATE	ANALYSIS FOR	RESULTS	UNITS	DETECTION LIMIT	COMMENTS
CV-89-0221	-	7137	CV-89-0221	STILL PAD	M.H. SEDIMENT SAMPLE	17-Apr-89 17-Apr-89 17-Apr-89 17-Apr-89	ETHYLBENZENE METH. CHLORIDE XYLENES AROCOLOR 1248	2.48 0.228 0.335 6,700	mg/kg mg/kg mg/kg mg/kg	0.167 0.167 0.167 1.0	
CV-89-0222	-	7137	CV-89-0222	STILL PAD	PIPE SEDIMENT SAMPLE	17-Apr-89 17-Apr-89 17-Apr-89	MEK XYLENES AROCOLOR 1248	15.3 167.5 41,400	mg/kg mg/kg mg/kg	4.00 4.00 1.0	
CV-89-0223	-	7137	CV-89-0223	STILL PAD	3rd RINSE	17-Apr-89 17-Apr-89	BUTYL CELLOSOLVE METH. CHLORIDE	85.4 169	mg/L ug/L	1.0 100	Initial run results shown, confirmed @ 84.1 mg/L
CV-89-0224	-	7137	CV-89-0224	STILL PAD	RINSEWATER SOURCE	17-Apr-89 17-Apr-89 17-Apr-89	METHANOL ACETONE METH. CHLORIDE	6.95 22.3 3.2	mg/L ug/L ug/L	1.0 10.0 2.0	
S-131	S-131	7137	S-131	SOUTH PAD	SOIL SAMPLE	17-Jul-89	TOLUENE	2	mg/kg	0.3	
004	S-135	7137	004	SOUTH PAD	SOIL SAMPLE	18-Jul-89	XYLENES	0.11	mg/kg	0.3	
005	S-136	7137	005	SOUTH PAD	SOIL SAMPLE	18-Jul-89	TOLUENE	0.8	mg/kg	0.3	
010	S-126	7137	010	SOUTH PAD	SOIL SAMPLE	18-Jul-89	TOLUENE	0.4	mg/kg	0.3	
013	S-107	7137	013	SOUTH PAD	SOIL SAMPLE	18-Jul-89 18-Jul-89	METH. CHLORIDE TOLUENE	0.3 0.4	mg/kg mg/kg	0.3 0.3	
015	S-109	7137	015	SOUTH PAD	SOIL SAMPLE (DUPL. S-109)	18-Jul-89	XYLENES	0.6	mg/kg	0.3	
018	S-112	7137	018	SOUTH PAD	SOIL SAMPLE	18-Jul-89	TOLUENE	0.4	mg/kg	0.3	
021	S-100	7137	021	SOUTH PAD	SOIL SAMPLE	18-Jul-89 18-Jul-89 18-Jul-89 18-Jul-89	ETHYLBENZENE METH. CHLORIDE TOLUENE XYLENES	2 0.3 21 8	mg/kg mg/kg mg/kg mg/kg	0.6 0.3 0.3 0.3	
024	S-80	7137	024	SOUTH PAD	SOIL SAMPLE	18-Jul-89	TOLUENE	0.5	mg/kg	0.3	
025	S-88	7137	025	SOUTH PAD	SOIL SAMPLE	18-Jul-89 18-Jul-89	METH. CHLORIDE TOLUENE	0.5 2	mg/kg mg/kg	0.3 0.3	
C541	C541	7137	JC6641	SOUTH PAD	SOIL SAMPLE	18-Jul-89	AROCOLOR 1254	0.334	mg/kg	0.25	
027	S-77	7137	027	SOUTH PAD	SOIL SAMPLE	18-Jul-89	METH. CHLORIDE	0.3	mg/kg	0.3	
028	S-76	7137	028	SOUTH PAD	SOIL SAMPLE	18-Jul-89 18-Jul-89 18-Jul-89	ETHYLBENZENE TOLUENE XYLENES	0.3 17 0.16	mg/kg mg/kg mg/kg	0.3 0.3 0.3	
029	S-72	7137	029	SOUTH PAD	SOIL SAMPLE	18-Jul-89 18-Jul-89 18-Jul-89	ETHYLBENZENE METH. CHLORIDE XYLENES	0.4 0.3 0.18	mg/kg mg/kg mg/kg	0.3 0.3 0.3	

PROJECT 7137

TABLE 2 - HAZARDOUS SUBSTANCE LIST VOLATILES (CONTINUED)  
(6" Sand, Dry South Pad)

SAMPLE IDENTIFIER: S-76  
ETC SAMPLE NUMBER: 7137-028

Compound	Concentration (mg/kg)	Detection Limit (mg/kg)
Acetone	BDL	6
Benzene	BDL	0.3
Bromodichloromethane	BDL	0.3
Bromoform	BDL	0.3
Bromomethane	BDL	0.6
2-Butanone	BDL	0.6
Carbon disulfide	BDL	0.3
Carbon tetrachloride	BDL	0.3
Chlorobenzene	BDL	0.3
Chloroethane	BDL	0.6
2-Chloroethylvinyl ether	BDL	0.6
Chloroform	BDL	0.3
Chloromethane	BDL	0.6
Dibromochloromethane	BDL	0.3
1,1-Dichloroethane	BDL	0.3
1,2-Dichloroethane	BDL	0.3
1,1-Dichloroethene	BDL	0.3
trans-1,2-Dichloroethene	BDL	0.3
1,2-Dichloropropane	BDL	0.3
cis-1,3-Dichloropropene	BDL	0.3
trans-1,3-Dichloropropene	BDL	0.3
Ethylbenzene	0.3	0.3
2-Hexanone	BDL	0.6
Methylene chloride	BDL	0.3
4-Methyl-2-Pentanone	BDL	0.6
Styrene	BDL	0.3
1,1,2,2-Tetrachloroethane	BDL	0.3
Tetrachloroethene	BDL	0.3
Toluene	17	0.3
1,1,1-Trichloroethane	BDL	0.3
1,1,2-Trichloroethane	BDL	0.3
Trichloroethene	BDL	0.3
Trichlorofluoromethane	BDL	0.3
Vinyl acetate	BDL	0.6
Vinyl chloride	BDL	0.6
Total Xylenes	0.16	0.3
1,2-Dichlorobenzene	BDL	0.3
1,3-Dichlorobenzene	BDL	0.3
1,4-Dichlorobenzene	BDL	0.3
Tetrahydrofuran	BDL	0.3
Acrolein	BDL	20
Acrylonitrile	BDL	6

mg/kg = ppm (parts-per-million)  
BDL = Below Detection Limit



State of Ohio Environmental Protection Agency

P.O. Box 1049, 1800 WaterMark Dr.  
Columbus, Ohio 43266-0149  
(614) 644-3020  
FAX (614) 644-2329

RECEIVED  
MAR 12 1993

George V. Voinovich  
Governor

Donald R. Schregardus  
Director

OFFICE OF RCRA  
Waste Management Division  
U.S. EPA, REGION V

March 5, 1993

Re: PPG Industries, Inc. - Circleville  
US EPA ID No.: OHD004304689  
Ohio ID No.: 01-65-0641  
Receipt of Amended Partial Closure Plan

PPG Industries, Inc.  
Attn: Mr. Bryant Riley  
PO Box 457  
Circleville, Ohio 43113

Dear Mr. Riley:

A public notice acknowledging the Ohio EPA's receipt of an amended partial closure plan for the PPG Industries, Inc. facility located on Pittsburgh Road, Circleville, Ohio 43113 will appear the week of March 8, 1993 in the Circleville Herald, Circleville, Ohio. The Director of the Ohio EPA will act upon the amended partial closure plan request following the close of the public comment period, April 14, 1993.

Copies of the amended partial closure plan will be available for public review at the Pickaway County District Public Library, 165 East Main Street, Circleville, Ohio 43113 and the Ohio EPA, Central District Office, 2305 Westbrooke Drive, Building C, Columbus, Ohio 43228.

Please contact Randy Sheldon at (614) 644-2977, should you have any questions concerning this matter.

Very truly yours,

*Thomas E. Crepeau*

Thomas E. Crepeau, Manager  
Data Management Section  
Division of Hazardous Waste Management

TEC/RS/ds

cc: Harriet Croke, US EPA, Region V  
Randy Meyer, RCRA TAS, DHWM  
Brad Campbell, CDO, DHWM

.../sheldon/wp-92/closereceit

PUBLIC NOTICE

Pickaway County

RECEIPT OF HAZARDOUS WASTE FACILITY  
AMENDED PARTIAL CLOSURE PLAN

For: PPG Industries, Inc., Pittsburgh Road, PO Box 457, Circleville, Ohio 43113, US EPA ID No.: OHD004304689, Ohio ID No.: 01-65-0641. The Ohio Environmental Protection Agency (OEPA) is hereby giving notice of the receipt of a Hazardous Waste Facility Amended Partial Closure Plan involving a Liquid Hazardous Waste Incinerator and Three (3) Hazardous Waste Drum Storage Areas (Still Pad, West Pad & South Pad) for the above referenced facility...

Copies of the facility's amended partial closure plan will be available for public review at the Pickaway County District Public Library, 165 East Main Street, Circleville, Ohio 43113 and the Ohio EPA, Central District Office, 2305 Westbrooke Drive, Building C, Columbus, Ohio 43228.

Comments concerning the amended partial closure plan should be submitted within thirty (30) days of this notice to: Ohio Environmental Protection Agency, Division of Hazardous Waste Management, Attn: Data Management Section, PO Box 1049, Columbus, Ohio 43266-0149 and Ohio Environmental Protection Agency, Central District Office, 2305 Westbrooke Drive, Building C, Columbus, Ohio 43228.



State of Ohio Environmental Protection Agency

O. Box 1049, 1800 WaterMark Dr.  
Columbus, Ohio 43266-0149

3.  
Hae



Richard F. Celeste  
Governor

January 24, 1989

CLOSURE PLAN DISAPPROVAL  
Issuance Date JAN 24 1989  
Effective Date FEB 27 1989

CERTIFIED MAIL

Re: Closure Plan  
PPG Industries  
OHD 004 304 689/01-65-0641

Mr. Mitchell Magee  
Environmental Central Manager  
PPG Industries  
P.O. Box 457  
Circleville, Ohio 43113

Dear Mr. Magee:

On September 12, 1988, PPG Industries submitted to Ohio EPA a closure plan for a liquid hazardous waste incinerator and three (3) hazardous waste drum storage areas located on Pittsburg Rd., Circleville, Ohio. The closure plan was submitted pursuant to Rule 3745-66-12 of the Ohio Administrative Code (OAC) in order to demonstrate that PPG Industries's proposal for closure complies with the requirements of OAC Rules 3745-66-11 and 3745-66-12.

The public was given the opportunity to submit written comments regarding the closure plan of PPG Industries in accordance with OAC Rule 3745-66-12. The public comment period extended from October 24, 1988, to December 1, 1988. Comments were received and considered by Ohio EPA in this matter.

Based upon review of the company's submittal and subsequent revisions, I conclude that the closure plan for the hazardous waste facility at PPG Industries does not meet the performance standard contained in OAC Rule 3745-66-11 and does not comply with the pertinent parts of OAC Rule 3745-66-12.

The closure plan submitted to Ohio EPA by PPG Industries is hereby **disapproved** (see Attachment A).

Due to the fact that the Ohio EPA is not currently authorized to conduct the federal hazardous waste program in Ohio, your closure plan also must be reviewed by USEPA. Federal RCRA closure regulations (40 CFR 265.112) require that you submit a closure plan to Lisa Pierard, Chief, Waste Management Division, Technical Programs Section, Ohio Unit, USEPA, Region V, 5HS-13, 230 South Dearborn Street, Chicago, Illinois 60604. Review and approval of the closure plan by both agencies is necessary prior to commencement of activities required by the approved closure plan.

You are notified that this action of the Director is issued as a proposed action pursuant to ORC Section 3745.07. This action will become final on the effective date indicated unless you or an objector files an appeal requesting an adjudication hearing within thirty (30) days of the date of issuance of this action. The adjudication hearing will be conducted in accordance with OAC Chapter 3745-47. The request for a hearing shall specify the issues of fact and law to be contested. Requests for hearings shall be sent to: Ohio Environmental Protection Agency, Hearing Clerk, 1800 WaterMark Drive, P.O. Box 1049, Columbus, OH 43266-0149.

A modified closure plan addressing the deficiencies enumerated in Attachment A must be submitted to the Director of the Ohio EPA for approval within thirty (30) days of the receipt of this letter in accordance with OAC 3745-66-12 and 3745-66-18. The modified closure plan should be submitted to: Ohio Environmental Protection Agency, Division of Solid and Hazardous Waste Management, Attn: Thomas Crepeau, Manager, Data Management Section, P.O. Box 1049, Columbus, Ohio 43266-0149. A copy should also be sent to: Jennifer Hille, Central District Office, 1800 WaterMark Dr. P.O. Box 1049, Columbus, OH 43266-0149, (614)644-2055.

Sincerely,



Richard L. Shank, Ph.D.  
Director

RLS/RM/ps

cc: DSHWM Central File, Ohio EPA  
Lisa Pierard, USEPA, Region V  
Jennifer Hille, CDO, Ohio EPA  
Steve Rath, CDO, Ohio EPA  
Randy Meyer, DSHWM, Ohio EPA



ATTACHMENT A  
PPG Industries

1. The total time needed for closure shall be clearly stated. Also, the length of time is given for each scheduled activity, but it is not clear which activities are to occur concurrently or at what point in the closure period they are scheduled to occur. Provide a closure schedule with timelines and a clear indication of the order of activities.
  2. Attachment 9, Alternative Decontamination Procedures, shall be referenced in the body of the closure plan.
  3. The components of the waste resin treated in the incinerator and stored in the three storage areas shall be provided.
  4. Details shall be provided concerning how rinseate generated from cleaning the incinerator base, spill containment pad and still pad storage area will be contained, collected and sampled. Specify how the residue scraped from these areas before rinsing will be managed.
  5. The plan states that samples will be collected according to EPA soil sampling and chain of custody protocol, composited and then analyzed using EPA SW-846 methods. In what way will these samples be composited? Samples collected within each grid may be composited, but each grid must be analyzed individually.
  6. Samples collected from the west drum storage pad shall also be analyzed for methylene chloride since the plan states that waste methylene chloride was stored there.
  7. Based on the grid sampling equation provided in the Ohio EPA Closure Plan Review Guidance, at least five additional soil samples shall be collected from the west pad storage area.
  8. The plan shall explain that Ohio EPA's facility inspector will be contacted in advance of crucial closure activities, such as soil sampling or removal, so the inspector may be present to observe these activities.
  9. The specific constituents which will be tested in soil and/or rinseate shall be clearly stated rather than using the term "RCRA - regulated compounds or solvents". Samples shall be tested for all constituents which were handled in the areas to be closed.
-

10. Rinseate samples from the pad areas, incinerator and any appurtenances shall be analyzed for all RCRA regulated hazardous waste solvents representative of the wastes stored or treated in each unit. These units shall not be considered decontaminated until the final rinseate does not exceed the public drinking water maximum contaminant level (MCL) for any hazardous waste constituent. If an MCL is not available for the constituent of concern, the maximum contaminant level goal (MCLG) shall be used. If the MCLG is less than the contaminant's analytical detection limit using methods found in USEPA Publication SW-846, the SW-846 analytical detection limit shall be used as the clean standard. If neither an MCL or an MCLG is available, 1 mg/l shall be used as the clean standard.

Rinseates exceeding the above criterion for any RCRA regulated hazardous waste solvent shall be managed as hazardous waste.

11. All soils and residue generated during closure must be disposed of in accordance with all applicable land disposal restriction regulations. Any waste taken to a hazardous waste landfill must meet the treatment standards for F001 - F005 solvents. If the costs for additional TCLP analyses has not been included in present closure figures, then the closure cost estimate shall be adjusted accordingly.
12. If the alternative decontamination procedures described in Attachment No. 9 are chosen, the incinerator and ancillary equipment must also meet the treatment standards for F001 - F005 solvents before being disposed of in a hazardous waste landfill in accordance with the land disposal restrictions.
13. Pursuant to 40 CFR 265.112(b)(4) and OAC 3745-66-12(b)(4), the closure plan shall include a detailed description of the procedures and equipment needed to remove contaminated soil.
14. Pursuant to 40 CFR 265.112(b)(3) and OAC 3745-66-12(b)(3), the plan shall identify the off-site hazardous waste disposal facility to be used for any inventory, contaminated soil, rinseate, dust and residues, and/or equipment.
15. Measures shall be taken to ensure that no contaminated soil or waste residues are tracked onto public roads by any trucks and/or equipment leaving PPG property.
16. The closure plan shall give detailed descriptions of the procedures and equipment to be used during decontamination efforts. It should include: (i) the location of the small curb area where equipment cleaning will taken place; (ii) how the plastic lining for this area

will be disposed of; (iii) details on how wash and rinse water collected during equipment cleaning will be tested; and (iv) the criteria to be used to determine how rinsewater is managed. Any rinsewater coming in contact with listed hazardous wastes must be managed as a listed waste.

17. The closure plan shall state that the still pad will not be used until the area has been certified as closed.
18. A statement shall be included that the owner/operator will also certify closure in accordance with 40 CFR 265.115 and OAC 3745-66-15.
19. The soil samples collected from the incinerator area and any rinsewater generated from cleaning the incinerator area and equipment shall also be tested for dioxins and furans (Method 8280) and PCBs.
20. Soil samples collected from the south and west drum storage areas shall also be tested for PCBs.
21. Rinsewater generated from cleaning the still pad storage area shall also be tested for PCBs.
22. The catch basins located within the still sludge container storage area shall be tested for the presence of those waste constituents which had been stored on the pad and for PCBs.



PPG Industries, Inc. P.O. Box 457 Circleville, Ohio 43113

Coatings and Resins

Certified Letter  
Return Receipt Requested

September 6, 1988

Mr. George Hamper  
Chief of Hazardous Waste  
Management Division  
Technical Program Section  
USEPA - Region V  
5HS-13  
230 South Dearborn Street  
Chicago, Illinois 60604

Re: Partial Closure Plan  
PPG Industries, Inc.  
Circleville, Ohio  
EPA ID #OHD004304689

Dear Mr. Hamper:

Please find enclosed the partial closure plan for the PPG Industries, Inc. facility located in Circleville, Ohio. This partial closure plan pertains to the following hazardous waste management units located at the manufacturing portion of the Circleville plant:

1. Liquid Waste Incinerator
2. Waste Drum Storage Area (Still Pad)
3. Waste Drum Storage Area (West Pad)
4. Waste Drum Storage Area (South Pad)

A minor addition has been made to the partial closure plan that has been included with this letter. This minor addition is Attachment #9 which describes alternative decontamination procedures. All other aspects of the partial closure plan submittal are identical to the partial closure plan previously submitted to the U.S. EPA as Appendix A of the closure plan.

If you have any questions, please do not hesitate to contact me.

Sincerely,

*Jeffrey J. Kirk*

Jeffrey J. Kirk  
Environmental Engineer

JJK/ksp

Enclosure

cc: L. LaDage, M. Magee, C. Babka, J. Richter,  
J. Hille - OEPA-CDO w/enclosure

RECEIVED  
SEP 13 1988  
OFFICE OF RCRA  
Waste Management Division  
U.S. EPA, REGION V

045-144



*new paragraph*

PPG Industries, Inc. P.O. Box 457 Circleville, Ohio 43113

Coatings and Resins

September 10, 1987

Mr. Kae Lee  
U.S. EPA - Region V  
RCRA Activities  
230 S. Dearborn Street 5HS-13  
Chicago, Illinois 60604

RECEIVED

SEP 14 1987

U. S. EPA, REGION V  
SWB - PMS

Subject: Updated Closure Plan  
Energy Recovery Unit  
PPG Industries, Inc.  
Circleville, Ohio

Dear Mr. Lee:

In response to your phone conversations with Amy Dengler on September 4 and 8, we have updated the closure plan per your requests. The following table references the pages on which revisions appear. Please replace pages I-1 through I-5 of your plan with the revised edition enclosed with this letter.

Updated Closure Plan

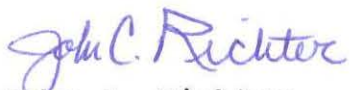
<u>Page</u>	<u>Revision</u>
I-2	The phrase, "and a final permit will be issued" was deleted from paragraph 3.
I-2	The typographical error "Intermi" was changed to the correct "Interim."
I-3	The typographical error "of" in the sentence, "When the decision is made to close the Energy Recovery Unit of the waste tanks. . ." was changed to "or."
I-4	In section 5, <u>Closure Certification</u> , the following sentence was added. "Within 90 days of the initiation of closure, all hazardous wastes in storage will be treated and/or disposed of in accordance with the approved Closure Plan and all closure activities will be completed within 180 days."

COPY 2  
045-110

Mr. Kae Lee  
U.S. EPA - Region V  
Page 2  
September 10, 1987

Please do not hesitate to call Amy Dengler or me at (614)  
474-3161 if you have any questions regarding these revisions  
or the Closure Plan.

Sincerely yours,



John C. Richter  
Manager, Energy Recovery Unit  
PPG Industries, Inc.  
P. O. Box 457  
Circleville, Ohio 43113

JCR:ad

cc: L. Adelsberger  
D. Cannon  
K. Fay  
L. LaDage  
L. Streff

enclosures

A.4.4.2



APPENDIX A  
PARTIAL CLOSURE PLAN  
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  4. Financial Assurance for Closure and Liability Requirements
  5. List of Hazardous Waste
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  - B. South Pad
  - C. West Pad
9. Alternative Decontamination Procedures

APPENDIX A

I. PARTIAL CLOSURE PLAN; FINANCIAL ASSURANCE FOR  
CLOSURE AND LIABILITY REQUIREMENTS

Regulation Reference: 40 CFR Subpart G, Sections  
265.110-115, 265.140-143  
265.147, 265.197 and 265.351

OAC 3745-55-10 through 20  
OAC 3745-55-40 through 47

1. Introduction

This Closure plan is designed to close the facility in a manner that 1) minimizes the need for further maintenance, and 2) controls, minimizes, or eliminates (to the extent necessary to protect human health and the environment) post-closure escape of hazardous wastes, hazardous waste constituents, leachate, contaminated rainfall, or waste decomposition products to the groundwater, surface water, or to the atmosphere.

This plan outlines closure procedures for the existing liquid waste incinerator and drum storage at the manufacturing portion of the plant. These areas will be closed as required by Section IIIC of Part A permit granted to PPG Industries by the Ohio Hazardous Waste Facility Board and Region V of the U.S. EPA.

## 2. Facility Description

PPG Industries, Inc., Coatings and Resins Group, owns and operates a manufacturing plant south of Circleville, Ohio, which produces synthetic organic and aqueous resins and intermediates. These resins are used in making paint and coatings products at other divisional manufacturing locations throughout the United States. In the production of resins and paints, wastes are generated from the cleaning of process equipment, filtering of products, byproducts of reactions and unusable finished products or raw materials.

The Energy Recovery Unit, constructed at the Circleville site, will receive these wastes and process them for thermal treatment by incineration. The wastes will be reduced to a small fraction of their original volume, and the energy value will be recovered in the form of steam to meet the total requirements of the manufacturing plant.

The Circleville plant is currently permitted under Interim Status to store wastes in drums and tanks and to treat liquids by incineration. Following the startup of the Energy Recovery Unit, only the existing waste tanks will be retained; the drum storage and liquid waste incineration operations will be closed in accordance with regulatory requirements.

The waste from the divisional manufacturing locations are hazardous due to ignitability, corrosivity, reactivity, or toxicity. The incineration process destroys the ignitable, corrosive, organic toxic and reactive properties. The toxic heavy metals are converted to a more stable form and are

encapsulated in a lava-like slag. The ash and slag will be managed as a hazardous waste and disposed of in accordance with existing regulations.

### 3. Closure of Hazardous Waste Facility

The partial closure of the existing liquid waste incinerator and drum storage areas will begin upon notice from the U.S. EPA and Ohio EPA that trial burn results are satisfactory. These areas were permitted as storage and treatment locations under RCRA Interim Status but will not be retained under Final Permit Status. See Attachment #1 for the estimated schedule for partial closure.

### 4. Financial Assurance for Closure and Liability Requirements

Financial responsibility for closure and liability requirements as specified in the regulations is provided pursuant to the financial test (see Attachment #3).

### 5. List of Hazardous Wastes

A complete list of hazardous wastes stored and/or treated at the waste management units to be closed is included in Attachment # 4. This table also includes an estimate of the maximum inventory of waste in storage or treatment.

### 6. Air Emissions

Appropriate engineering controls will be used to minimize odors and dust emissions. Water spray may be used if necessary to control fugitive dust emissions.

7. Personnel Safety and Fire Protection

Disposable coveralls, gloves, boots, safety glasses, and rain gear, will be provided to the cleanup personnel if necessary. Dust respirators will be used whenever personnel must enter the incinerator or whenever conditions require them.

Prior to leaving the decontamination area, the coveralls will be removed and discarded; residues from the boots or other outside protective clothing will be scraped or rinsed off. Personnel undergoing decontamination will stand in containment areas to catch all rinseate and residues.

8. Description of Waste Management Units to be Closed

- A. The Incinerator--Part A Application, line 5  
(refer to Attachment 7.A. for a detailed drawing of this hazardous waste management unit)

The unit consists of a liquid waste incinerator with three (3) lances (two for organic wastes and one for aqueous wastes), which feed wastes to the hearth. Other components of the unit include a breech, containing a temperature recorder that controls the waste feed pumps, and a discharge stack, containing a quench water system. The incinerator has been in use since 1971. Ancillary equipment to the incinerator consists of three (3) waste lines that feed directly into the lances and a blower that creates air turbulence in the incinerator hearth. The incinerator area also includes a concrete containment area that comes off the southeast corner of the incinerator pad. The topography of

the area is flat. Wastes treated in the incinerator include the following:

D001 - Waste Resin

F003 - Still sludge including xylene, ethyl benzene, methyl isobutyl ketone and methanol

F005 - Still sludge including toluene and methyl ethyl ketone

B. Waste Drum Storage Area, Still Pad--Part A Application, line 1

(refer to Attachment 7.B. for a detailed drawing of this hazardous waste management unit)

The unit consists of a concrete pad, approximately 80' x 100' on which waste drums are stored.

The pad has been in use since 1965. The area is flat.

Wastes stored on the pad include the following:

D001 - Waste Resin

F002 - Waste methylene chloride

F003 - Incinerator ash generated by the  
F005 incineration of F003 and F005 wastes

U009 - Waste resin and acrylonitrile

U223 - Polyether sump salts and toluene diisocyanate

U223 - Waste resin and toluene diisocyanate

Drums containing lab packs

C. Waste Drum Storage Area - West Pad (Part A Application, line 1)

The unit consists of a flat area that is covered by packed gravel. The storage pad is approximately 10' by



100'. This unit was in use from 1975 - 1985. Waste stored in this area included the following:

D001 - Waste Resin

F002 - Waste Methylene Chloride

D. Drum Storage Area - South Pad (Part A Application, line 1)

This unit consists of a flat, packed gravel area that is approximately 90' by 240'. This area contains a consolidation platform with a concrete containment pad underneath. The pad has been in use since 1976. Wastes stored in this area include the following:

D001 - Waste Resin

9. Decontamination Efforts

An independent, registered professional engineer will certify that appropriate methods were used and that the minimum amount of residue remains.

A. Incinerator

After shutdown and cooldown, all residue in the incinerator hearth, breech and stack will be removed and put into lined open-top roll-off bins. All attached refractory or residue on the walls of the incinerator and stack will be cleaned with a wire brush and vacuumed. Any area that is not readily accessible will be dismantled as necessary to ensure access for complete decontamination. All removed material will be

secured from spillage or leakage.

All parts will be brushed, wiped and washed with water. The parts will be rinsed 2 - 3 times. The water will be collected in a secure container. The water will be tested for EP Toxicity and levels of RCRA-regulated waste solvent. If the rinseate exceeds the EP limits or contains more than 1 mg/l of RCRA-regulated solvent, the parts will be washed again; the second wash will be retested. All contaminated water will be either sent directly offsite for treatment or blended with other water-based wastes prior to shipment offsite. It is estimated that 1000 gallons of wash water will be generated.

Once decontaminated, the parts will be sold as scrap metal. Residues will be tested for EP Toxicity and total RCRA metals and disposed of as hazardous waste. Residues are automatically hazardous wastes since listed wastes were burned in the incinerator.

#### B. Incinerator Organic Waste Feed Lines

There are two (2) organic waste feed lines, each of which is approximately 120 feet long and 1 1/2 inch in diameter.

The lines will be cleaned of organic residue by repeatedly flushing them with 50 gallons of cleaning solvent (the same solvent used to clean production equipment). The cleaning solvent will be analyzed for % total solids before

and after each flush. When the "Before" and "After" % solids analysis of the cleaning solvent are within 0.5% of each other, solvent cleaning will cease. This rinsing should require about 400 gallons of solvent. The solvent will be recycled through the existing plant solvent recovery system. The recovered solvent will be reused within the plant. The still sludge from the solvent recovery process will be disposed of as hazardous waste, which is the normal procedure.

Following the solvent cleaning the lines will be flushed 2 to 3 times with water to remove residual solvent. The water will be tested for RCRA-regulated solvent. If found to be contaminated with more than 1 mg/l of these materials, the water will be classified as a hazardous waste and treated appropriately. This rinsing is expected to require 200 gallons of water. The closure cost estimate includes third party costs for recycling the solvent and treatment of the rinsewater even though it will be done onsite.

The cleaned pipe will then be taken down, cut into section, and visually inspected for hardened residues. If the piping is clear, it will be sold as scrap metal. If still contaminated, the piping will be managed as hazardous waste.

#### C. Incinerator Aqueous Waste Feed Line

The Aqueous Waste Feed Line is about 100 feet long and

one (1) inch in diameter. It will be flushed at least four times with 50 gallons of deionized water. The first three rinses will be classified as hazardous waste and handled accordingly. The fourth rinse will be tested for F003 and F005 constituents. If found to be contaminated, this fourth rinse will also be disposed of as a hazardous waste. If found to be clean (containing less than 1 mg/l of RCRA-regulated solvents), the rinseate will be treated in the Wastewater Treatment Plant (RBCs). Rinsing will continue until the rinseate is clean (i.e., less than 1 mg/l of F003 and F005 solvents.)

Once cleaned, the line will be taken down, cut into sections, and inspected. If the piping is clean, it will be sold as scrap metal. If still contaminated, the piping will be managed as hazardous waste.

D. Incinerator Base, Spill Containment Pad and Drum Storage Pad (Still Pad)

Once the incinerator equipment and residues have been placed in secure containers, the incinerator base, spill containment pad and adjacent drum storage area will be swept to remove any loose debris.

These areas will be scraped to remove any visible residue. The areas will then be scrubbed with a water rinse. The rinseate will be tested for RCRA-regulated solvents. If contamination is present in amounts greater than 1 mg/l, the rinseate will be treated as a hazardous

waste and handled accordingly. Rinsing will continue until all RCRA-regulated solvents are present at less than 1 mg/l.

10. "Clean" Levels for Soil

Soils will be tested for the presence of RCRA-regulated solvents. The soil will be considered "clean" if such compounds are not present above analytical detection limits using methods in U. S. EPA's Publication SW-846, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods." Soil samples will not be tested for heavy metals because they are not used in production processes and therefore would not appear in the soil.

11. Soil Sampling and Removal Efforts

Sampling methods and equipment, as well as laboratory analytical methods, will follow U.S. EPA's publication, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods." Sampling will be done by an independent contractor, and the analyses will be performed by an outside laboratory with an approved QA/QC plan for each parameter of interest. When a laboratory is selected to do the work, the information pertaining to the laboratory's QA/QC plan will be sent to state and federal regulatory agencies if they so desire.

A. Incinerator Area

The soil around the incinerator will be tested for F003 and F005 constituents at points designated by the hatched areas of the Sampling Grid as shown in Attachment 8.A. The representative sample points noted on all Sampling Grids in this plan (Attachment 8.A., 8.B., and

8.C.) were developed using SW-846 protocol and a random number generator. If two points were adjacent, the next number was used. Samples will be collected according to EPA soil sampling and chain of custody protocol, composited, and then analyzed using EPA SW-846 methods. Initial samples will be collected to a 6-inch depth. Three background samples will also be taken to provide baseline data. One sample will be taken downwind from the existing liquid waste incinerator in the northeast portion of the plant property, one will be taken upwind from the existing liquid waste incinerator in the southwest portion of the plant, and one sample will be taken in the northwest section of the plant property.

Prevailing winds are from the south and southwest. If no contamination is found, no further sampling will be done.

If evidence of contamination is found, samples will be taken to a depth that will determine the extent of the contamination. The soil samples will be tested for F003 and F005 listed wastes, which were the only listed wastes handled in the incinerator. In F003 and F005, several solvents are listed; however only a few of these were present in this wastestream. Those tested will be Xylene, Ethyl Benzene, Methyl Isobutyl Ketone, and Methanol (from F003) and Toluene and Method Ethyl Ketone from F005. Ignitability will not be checked because there is no approved method for testing flash point of solid wastes. Heavy metals will not be tested because they are not used in manufacturing processes at the facility where the waste is generated.

It is unlikely that spills occurred in the incinerator area because of the closed piping system. The only possible leakage would have been at the connection to the incinerator. No contaminated runoff occurred to the best of our knowledge because of the containment pad around the incinerator. Samples will be taken in the areas designated in Attachment 8.A. The soil will be considered clean only if RCRA-regulated compounds are not present above analytical detection limits using methods in SW-846. Any soil found to be contaminated with listed wastes will be removed and managed as hazardous waste or managed by other appropriate methods approved by the EPA.

B. South Drum Storage Area

This waste drum storage and consolidating area south of Building 2 will be closed. The present 45' x 15' concrete spill containment pad currently being used for consolidating drummed waste will be demolished.

The broken concrete will be placed in lined open-top roll-off boxes or lined trailers and taken to a hazardous waste landfill.

Soil samples will be taken at points indicated by the hatched areas on the Sampling Grid shown in Attachment 8.B. The soil will be tested for F003 and F005 listed wastes (specifically Xylene, Ethyl Benzene, MIBK, Methanol, Toluene, Methyl Ethyl Ketone which were the only listed waste handled in this area). Soil will not be tested for heavy

metals because these materials are not used in production processes.

The first 6" of soil will be sampled and tested. If these samples indicate no contamination, no further samples will be taken. If the soil is contaminated, further sampling will continue until the boundary of the contamination is defined. The soil will be considered clean only if RCRA-regulated compounds are not present above analytical detection limits using methods in SW-846. Contaminated soil will be placed in lined trailers and taken to a hazardous waste landfill or managed by other appropriate methods approved by the EPA.

C. West Drum Storage Pad

This waste drum storage area west of Building 2 will be closed. Soil samples will be taken at points indicated by the hatched areas on the Sampling Grid shown in Attachment 8.C. The soil will be tested for F003 and F005 listed wastes, (specifically, Xylene, Ethyl Benzene, MIBK, Methanol, Toluene and Methyl Ethyl Ketone which were the only listed wastes handled in this area). Soil will not be tested for heavy metals because these materials are not used in production processes.

The first 6" of soil will be sampled and tested. If these samples indicate no contamination, no further samples will be taken. If the soil is contaminated, further



sampling will continue until the boundary of the contamination is defined. The soil will be considered clean only if RCRA-regulated compounds are not present above analytical detection limits using methods in SW-846. Contaminated soil will be placed in lined trailers and taken to a hazardous waste landfill or managed by appropriate methods approved by the EPA.

12. Removal Efforts

Contaminated soil will be loaded into lined, covered trailers and taken to a secure landfill for disposal.

13. Description of Equipment Cleaning

Residues generated by the scraping of equipment will be handled as hazardous waste. Wash or rinse water will be collected, tested and managed appropriately. The water will be collected in a small curb area lined with plastic.

14. Certification

PPG will provide certification that the existing liquid waste incinerator and drum storage pads have been closed in accordance with the approved partial closure plan. An independent registered professional engineer will be present during critical stages of closure activities, such as incinerator demolition, line flushing and decontamination of the storage pads. This engineer will also certify that Partial Closure was performed in accordance with the approved plan.

15. Status of the Facility

At the completion of partial closure activities, the drum storage pad (the still pad identified as waste management area #3 in Attachment 6, the facility plot drawing) will be used as a satellite storage or "less-than-90-day-storage" area. The liquid waste incinerator in the manufacturing area and the other drum storage areas (identified as hazardous waste management units #2, #4, and #5 on the facility plot drawing) will be permanently closed.

APPENDIX A

Attachment 1

SCHEDULE FOR PARTIAL CLOSURE

Schedule for Partial Closure:

The closure timetable will start when approval is received by the Director of the Ohio EPA.

Schedule Activity	Duration in Weeks
Begin Partial Closure	
Analyze Soil and Rinseate	13 weeks
Decontaminate and Remove Incinerator	13 weeks
Remove Incinerator Residues	13 weeks
Remove South Drum Pad	5 weeks
Remove Contaminated Soil	9 weeks
Finish Partial Closure Activities including backfilling areas	4 weeks
Certify Completion of Partial Closure (by Independent Registered P.E.)	

APPENDIX A  
ATTACHMENT 2

PARTIAL CLOSURE- COST ESTIMATE  
CIRCLEVILLE FACILITY- EXISTING LIQUID INCINERATOR  
AND DRUM STORAGE AREA

TOTAL

A. DECONTAMINATION /  
REMOVAL

1. NUMBER OF MEN	2
2. NUMBER OF HRS / WEEK	40
3. NUMBER OF WEEKS	3
4. LABOR COST (\$ / HR)	\$30
5. TOTAL COST (\$)	\$7,200

\$7,200

B. INCINERATOR  
DEMOLITION

\$22,000

C. SCRAP VALUE OF  
UNIT

(\$800)

D. SOIL SAMPLING

1. SAMPLES TAKEN	SOIL	73
	WATER	3
	SOLVENT	1
2. ANALYSIS (\$/SAMPLE)		\$250
3. TOTAL COST (\$)		\$19,250

\$19,250

E. SOIL REMOVAL

1. AMOUNTS	WIDTH (FT)	LENGTH (FT)	DEPTH (FT)	CUBIC YDS.
INCINERATOR	90	110	0.5	183.3
WEST PAD	20	110	0.5	40.7
SOUTH PAD				
SOIL	110	260	3	3177.8
CONCRETE	45	15	0.5	12.5
SCAFFOLD				2

TOTAL

3416.4

2. DISPOSAL FEE (\$ / CU. YD.)	\$193.7
-----------------------------------	---------

\$661,747

3. DISPOSAL COST

4. LABOR

PARTIAL CLOSURE- COST ESTIMATE  
 JIRCLEVILLE FACILITY- EXISTING LIQUID INCINERATOR  
 AND DRUM STORAGE AREA

			TOTAL
	AMOUNT (CU. YDS.)	3416.4	
	RATE (CU. YDS. / HR)	100	
	LABOR COST (\$ / HR)	\$100	
	TOTAL	\$3,416	\$3,416
F. REFRACTORY DISPOSAL			
	1. AMOUNT (TONS)	29.84	
	2. DISPOSAL FEE (\$ / TON)	\$125	
	3. DISPOSAL COST	\$3,730	\$3,730
G. WASTE DISPOSAL			
	1. NUMBER OF DRUMS	1000	
	2. AVG. COST / DRUM (\$)	\$200	
	3. TOTAL COST	\$200,000	\$200,000
H. TREATMENT OF WATER AND SOLVENT			\$1,000
I. PE CERTIFICATION			\$2,000
		SUBTOTAL	\$920,343
		CONTINGENCY @ 15%	\$138,052
		ADMINISTRATIVE @ 10%	\$92,034
		TOTAL	\$1,150,429

APPENDIX A



PPG Industries, Inc. One PPG Place Pittsburgh, Pennsylvania 15272

ATTACHMENT 3

Law Department  
Writer's Direct Dial No.: (412) 434-2451

March 27, 1987

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Mr. Valdas V. Adamkus  
Regional Administrator  
U.S. Environmental Protection Agency  
Region V  
230 South Dearborn Street  
Chicago, IL 60604

Dear Sir:

Enclosed are documents evidencing PPG's demonstration of financial responsibility under the Resource Conservation and Recovery Act. In addition to the letter from our Chief Financial Officer, Mr. Mitchel, and PPG's independent accounting firm, Deloitte Haskins & Sells, we have enclosed a copy of our Form 10-K.

PPG has endeavored to assure that the wording of the letter is in accordance with all applicable requirements. In this regard, please note that the total sum of aggregate sudden and non-sudden liability demonstrated is \$15 million. This amount is pursuant to requirements of the State of Louisiana and is used in all of PPG's financial responsibility demonstration letters.

Please address all questions on this submission to Susan Kuis  
(412) 434-2451.

Sincerely,

A handwritten signature in cursive script, reading 'Susan G. Kuis'.  
Susan G. Kuis  
Attorney

SGK/tah

Enclosure



PPG Industries, Inc. One PPG Place Pittsburgh, Pennsylvania 15272

Law Department  
Writer's Direct Dial No.:

March 27, 1987

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Mr. Valdas V. Adamkus  
Regional Administrator  
U.S. Environmental Protection Agency  
Region V  
230 Dearborn Street  
Chicago, IL 60604

RE: Letter from Chief Financial Officer to Demonstrate  
Both Liability Coverage and Assurance of Closure  
or Post-Closure Care

Dear Sir:

I am the Chief Financial Officer of PPG Industries, Inc., One PPG Place, Pittsburgh, Pennsylvania 15272. This letter is in support of the use of the financial test to demonstrate financial responsibility for liability coverage and closure and/or post-closure care as specified in Subpart H of 40 CFR, Parts 264 and 265.

The owner or operator identified above is the owner or operator of the following facilities for which liability coverage is being demonstrated through the financial test specified in Subpart H of 40 CFR Parts 264 and 265:

<u>EPA ID Number</u>	<u>Address</u>
OHD004198917	Barberton, OH
OHD004304689	Circleville, OH
OHD004460143	Cleveland, OH
OHD004347308	Delaware, OH
CAD008323438	Torrance, CA

1. The owner or operator identified above owns or operates the following facilities for which financial assurance for closure or post-closure care is demonstrated through the financial test specified in

APPENDIX A

ATT. 3

-2-

Subpart H of 40 CFR, Parts 264 and 265. The current closure and/or post-closure cost estimates covered by the test are shown for each facility:

<u>EPA ID Number</u>	<u>Address</u>	<u>Closure Costs</u>	<u>Post-Closure Costs</u>
OHD004198917	Barberton, OH	\$ 161,400	0
OHD004304689	Circleville, OH	718,000	0
OHD004460143	Cleveland, OH	153,200	0
OHD004347308	Delaware, OH	83,000	0
CAD008323438	Torrance, CA	218,500	0
	TOTAL	\$1,334,100	0

2. The owner or operator identified above guarantees, through the corporate guarantee specified in Subpart H of 40 CFR, Parts 264 and 265, the closure and post-closure care of the following facilities owned or operated by its subsidiaries. The current cost estimates for the closure or post-closure care so guaranteed are shown for each facility: None.

3. In States where EPA is not administering the financial requirements of Subpart H of 40 CFR, Parts 264 and 265, this owner or operator is demonstrating financial assurance for the closure or post-closure care of the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in Subpart H of 40 CFR, Parts 264 and 265. The current closure and/or post-closure cost estimates covered by such a test are shown for each facility:

<u>EPA ID Number</u>	<u>Address</u>	<u>Closure Costs</u>	<u>Post-Closure Costs</u>
MIDO48788749	Adrian, MI	\$ 74,500	0
TXD020305446	Beaumont, TX	2,500	0
DED060074291	Dover, DE	23,100	0
GAD075876623	East Point, GA	60,200	0
TXD008070898	Houston, TX	57,200	0
LAD008086506	Lake Charles, LA	5,483,400	\$646,800
TXD000356907	LaPorte, TX	40,000	0
WVD004336343	Natrium, WV	597,200	264,300
	TOTAL	\$6,338,100	\$911,100

4. The owner or operator identified above owns or operates the following hazardous waste management facilities for which financial assurance for closure or, if a disposal facility, post-closure care, is not demonstrated either to EPA or a State through the financial test or any other financial assurance mechanism specified in Subpart H of 40 CFR, Parts 264 and 265 or equivalent State mechanisms. The current closure and/or post-closure cost estimates not covered by such financial assurance are shown for each facility: None.



Mr. Valdas V. Adamkus  
Page 3  
March 27, 1987

This owner or operator is required to file a Form 10K with the Securities and Exchange Commission (SEC) for the latest fiscal year.

The fiscal year of this owner or operator ends on December 31. The figures for the following items marked with an asterisk are derived from this owner's or operator's independently audited, year-end financial statements for the latest completed fiscal year, ended December 31, 1986.

Alternative 1:

(in Millions)

1. Sum of current closure and post-closure cost estimates (total of all cost estimates listed above).	\$	8.583
2. Amount of annual aggregate liability coverage to be demonstrated.	\$	15.000
3. Sum of lines 1 and 2.	\$	23.583
*4. Total liabilities (if any portion of your closure or post-closure cost estimates is included in your total liabilities, you may deduct that portion from this line and add that amount to lines 5 and 6).	\$	2,663.6
*5. Tangible net worth.	\$	1,769.4
*6. Net worth.	\$	1,977.8
*7. Current assets.	\$	1,615.9
*8. Current liabilities.	\$	975.7
9. Net working capital (line 7 minus line 8).	\$	640.2
*10. The sum of net income plus depreciation, depletion, and amortization.	\$	566.9
*11. Total assets in U.S. (required only if less than 90% of assets are located in the U.S.).	\$	3,371.0
	YES	NO
12. Is line 5 at least \$10 million?	X	—
13. Is line 5 at least 6 times line 3?	X	—
14. Is line 9 at least 6 times line 3?	X	—

APPENDIX A

Mr. Valdas V. Adamkus  
Page 4  
March 27, 1987

	<u>YES</u>	<u>NO</u>
*15. Are at least 90% of assets located in the U.S.? If not, complete line 16.	_____	<u>X</u>
16. Is line 11 at least 6 times line 3?	<u>X</u>	_____
17. Is line 4 divided by line 6 less than 2.0?	<u>X</u>	_____
18. Is line 10 divided by line 4 greater than 0.1?	<u>X</u>	_____
19. Is line 7 divided by line 8 greater than 1.5?	<u>X</u>	_____

I hereby certify that the wording of this letter is identical to the wording specified in Section 264.151(g) as such regulations were constituted on the date shown immediately below.

Sincerely,



R. H. Mitchel  
Vice President, Finance  
March 27, 1987

RHM/tah

APPENDIX A

ATT. 3

# Deloitte Haskins+Sells

2400 One PPG Place  
Pittsburgh, Pennsylvania 15222  
(412) 263-6900  
Telex 4423028

PPG Industries, Inc.  
One PPG Place  
Pittsburgh, PA 15272

March 27, 1987

Dear Sirs:

We have examined the balance sheet of PPG Industries, Inc. and consolidated subsidiaries as of December 31, 1986 and the related statements of earnings and of source and use of funds for the year then ended, and have issued our report thereon dated January 22, 1987. Our examination was made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. We have not performed any auditing procedures beyond the date of our opinion on the financial statements; accordingly, this report is based on our knowledge as of that date and should be read with that understanding.

At your request, we have performed the procedures enumerated below with respect to the accompanying letter from Mr. Robert H. Mitchel to the Regional Administrator, Region V, U.S. Environmental Protection Agency, dated March 27, 1987. It is understood that this report is solely for filing with the Regional Administrator, Region V, U.S. Environmental Protection Agency, in accordance with requirements of the Resource Conservation and Recovery Act, and is not to be used for any other purpose. The procedures that we performed are summarized as follows:

1. We compared the amounts included in items 4, 6, 7, 8 and 11 under the caption Alternative I in the letter referred to above with the corresponding amounts in the financial statements referred to in the first paragraph.
2. We recomputed from, or reconciled to, the financial statements referred to in the first paragraph the information included in items 5, 10 and 15 - under the caption Alternative I in the letter referred to above.

Because the procedures referred to in the preceding paragraph were not sufficient to constitute an examination made in accordance with generally accepted auditing standards, we do not express an opinion on any of the information or amounts listed under the caption Alternative I in the aforementioned letter. In performing the procedures referred to above, however, no matters came to our attention that caused us to believe that the information or amounts included in items 4, 5, 6, 7, 8, 10, 11 and 15 should be adjusted.

Yours truly,

*Deloitte Haskins+Sells*

APPENDIX A

ATT. 3

-6-



CV  
cc  
Bel

PPG Industries, Inc. One PPG Place Pittsburgh, Pennsylvania 15272

Law Department  
Writer's Direct Dial No.: (412) 434-2451

March 27, 1987

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Director  
Ohio Environmental Protection Agency  
361 East Broad Street  
Columbus, OH 43215

Dear Sir:

Enclosed are documents evidencing PPG's demonstration of financial responsibility under the Resource Conservation and Recovery Act. In addition to the letter from our Chief Financial Officer, Mr. Mitchel, and PPG's independent accounting firm, Deloitte Haskins & Sells, we have enclosed a copy of our Form 10-K.

PPG has endeavored to assure that the wording of the letter is in accordance with all applicable requirements. In this regard, please note that the total sum of aggregate sudden and non-sudden liability demonstrated is \$15 million. This amount is pursuant to requirements of the State of Louisiana and is used in all of PPG's financial responsibility demonstration letters.

Please address all questions on this submission to Susan Kuis  
(412) 434-2451.

Sincerely,

A handwritten signature in cursive script that reads "Susan G. Kuis".

Susan G. Kuis  
Attorney

SGK/tah

Enclosure

APPENDIX A

ATT. 3



PPG Industries, Inc. One PPG Place Pittsburgh, Pennsylvania 15272

Law Department  
Writer's Direct Dial No.:

March 27, 1987

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Director  
Ohio Environmental Protection Agency  
361 East Broad Street  
Columbus, OH 43215

RE: Letter from Chief Financial Officer to Demonstrate  
Both Liability Coverage and Assurance of Closure  
or Post-Closure Care

Dear Sir:

I am the Chief Financial Officer of PPG Industries, Inc., One PPG Place, Pittsburgh, Pennsylvania 15272. This letter is in support of the use of the financial test to demonstrate financial responsibility for liability coverage and closure and/or post-closure care as specified in chapters 3745-55 and 3745-66 of the Administrative Code.

The owner or operator identified above is the owner or operator of the following facilities for which liability coverage is being demonstrated through the financial test specified in chapters 3745-55 and 3745-66 of the Administrative Code:

<u>EPA ID Number</u>	<u>Ohio Permit</u>	<u>Address</u>
OHD004198917	02-77-8453	Barberton, OH
OHD004304689	01-65-0063	Circleville, OH
OHD004460143	02-18-0064	Cleveland, OH
OHD004347308	01-21-0473	Delaware, OH

1. The owner or operator identified above owns or operates the following facilities for which financial assurance for closure or post-closure care is demonstrated through the financial test specified in chapters 3745-55 and 3745-66 of the Administrative Code. The current closure and/or post-closure cost estimates covered by the test are shown for each facility:

APPENDIX A

ATT. 3

Director, Ohio EPA  
Page 2  
March 27, 1987

<u>EPA ID Number</u>	<u>Ohio Permit</u>	<u>Address</u>	<u>Closure Costs</u>	<u>Post-Closure Costs</u>
OHD004198917	02-77-8453	Barberton, OH	\$161,400	0
OHD004304689	01-65-0063	Circleville, OH	718,000	0
OHD004460143	02-18-0064	Cleveland, OH	153,200	0
OHD004347308	01-21-0473	Delaware, OH	83,000	0
TOTAL			\$1,115,600	0

2. The owner or operator identified above guarantees, through the corporate guarantee specified in chapters 3745-55 and 3745-66 of the Administrative Code, the closure and post-closure care of the following facilities owned or operated by its subsidiaries. The current cost estimates for the closure or post-closure care so guaranteed are shown for each facility: None.

3. In States where U.S. EPA or a State so authorized is administering the financial requirements of Subpart H of 40 CFR, Parts 264 and 265, this owner or operator is demonstrating financial assurance for the closure or post-closure care of the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in chapters 3745-55 and 3745-66 of the Administrative Code. The current closure and/or post-closure cost estimates covered by such a test are shown for each facility:

<u>EPA ID Number</u>	<u>Address</u>	<u>Closure Costs</u>	<u>Post-Closure Costs</u>
MID048788749	Adrian, MI	\$ 74,500	0
TXD020305446	Beaumont, TX	2,500	0
DED060074291	Dover, DE	23,100	0
GAD075876623	East Point, GA	60,200	0
TXD008070898	Houston, TX	57,200	0
LAD008086506	Lake Charles, LA	5,483,400	\$646,800
TXD000356907	LaPorte, TX	40,000	0
WVD004336343	Natrium, WV	597,200	264,300
CAD008323438	Torrance, CA	218,500	0
TOTAL		\$6,556,600	\$911,100

4. The owner or operator identified above owns or operates the following hazardous waste management facilities for which financial assurance for closure or, if a disposal facility, post-closure care, is not demonstrated to the director through the financial test or any other financial assurance mechanism specified in Chapters 3745-55 or 3745-66 of the Administrative Code. The current closure and/or post-closure cost estimates not covered by such financial assurance are shown for each facility: None.

#### APPENDIX A

ATT. 3

Director, Ohio EPA  
Page 3  
March 27, 1987

This owner or operator is required to file a Form 10K with the Securities and Exchange Commission (SEC) for the latest fiscal year.

The fiscal year of this owner or operator ends on December 31. The figures for the following items marked with an asterisk are derived from this owner's or operator's independently audited, year-end financial statements for the latest completed fiscal year, ended December 31, 1986.

<u>Alternative 1:</u>	<u>(in Millions)</u>	
1. Sum of current closure and post-closure cost estimates (total of all cost estimates listed above).	\$	<u>8.583</u>
2. Amount of annual aggregate liability coverage to be demonstrated.	\$	<u>15.000</u>
3. Sum of lines 1 and 2.	\$	<u>23.583</u>
*4. Total liabilities (if any portion of your closure or post-closure cost estimates is included in your total liabilities, you may deduct that portion from this line and add that amount to lines 5 and 6).	\$	<u>2,663.6</u>
*5. Tangible net worth.	\$	<u>1,769.4</u>
*6. Net worth.	\$	<u>1,977.8</u>
*7. Current assets.	\$	<u>1,615.9</u>
*8. Current liabilities.	\$	<u>975.7</u>
9. Net working capital (line 7 minus line 8).	\$	<u>640.2</u>
*10. The sum of net income plus depreciation, depletion, and amortization.	\$	<u>566.9</u>
*11. Total assets in U.S. (required only if less than 90% of assets are located in the U.S.).	\$	<u>3,371.0</u>
	<u>YES</u>	<u>NO</u>
12. Is line 5 at least \$10 million?	<u>X</u>	<u>      </u>
13. Is line 5 at least 6 times line 3?	<u>X</u>	<u>      </u>
14. Is line 9 at least 6 times line 3?	<u>X</u>	<u>      </u>

APPENDIX A

ATT. 3

Director, Ohio EPA  
Page 4  
March 27, 1987

	<u>YES</u>	<u>NO</u>
*15. Are at least 90% of assets located in the U.S.? If not, complete line 16.	<u>      </u>	<u>  X  </u>
16. Is line 11 at least 6 times line 3?	<u>  X  </u>	<u>      </u>
17. Is line 4 divided by line 6 less than 2.0?	<u>  X  </u>	<u>      </u>
18. Is line 10 divided by line 4 greater than 0.1?	<u>  X  </u>	<u>      </u>
19. Is line 7 divided by line 8 greater than 1.5?	<u>  X  </u>	<u>      </u>

I hereby certify that the wording of this letter is identical to the wording specified in Paragraph (G) of rule 3745-55-51 of the Administrative Code as such regulations were constituted on the date shown immediately below.

Sincerely,



R. H. Mitchel  
Vice President, Finance  
March 27, 1987

RHM/tah

APPENDIX A

ATT. 3

-11-



ADDENDUM

Explanation of significant changes from the 1985 financial responsibility submission.

Significant changes in closure/post-closure costs:

TXD020805446	Beaumont, TX Completion of closure of surface impoundment.
LAD008086506	Lake Charles, LA Change in method of closure for surface impoundment.
WVD004336343	Natrium, WV Post-closure monitoring contingency.
CAD008323438	Torrance, CA Changes reflect increased disposal costs.

# Deloitte Haskins + Sells

2400 One PPG Place  
Pittsburgh, Pennsylvania 15222  
(412) 263-6900  
Telex 4423028

PPG Industries, Inc.  
One PPG Place  
Pittsburgh, PA 15272

March 27, 1987

Dear Sirs:

We have examined the balance sheet of PPG Industries, Inc. and consolidated subsidiaries as of December 31, 1986 and the related statements of earnings and of source and use of funds for the year then ended, and have issued our report thereon dated January 22, 1987. Our examination was made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. We have not performed any auditing procedures beyond the date of our opinion on the financial statements; accordingly, this report is based on our knowledge as of that date and should be read with that understanding.

At your request, we have performed the procedures enumerated below with respect to the accompanying letter from Mr. Robert H. Mitchel to the Ohio Environmental Protection Agency dated March 27, 1987. It is understood that this report is solely for filing with the Ohio Environmental Protection Agency in accordance with requirements of the Resource Conservation and Recovery Act, and is not to be used for any other purpose. The procedures that we performed are summarized as follows:

1. We compared the amounts included in items 4, 6, 7, 8 and 11 under the caption Alternative I in the letter referred to above with the corresponding amounts in the financial statements referred to in the first paragraph.
2. We recomputed from, or reconciled to, the financial statements referred to in the first paragraph the information included in items 5, 10 and 15 under the caption Alternative I in the letter referred to above.

Because the procedures referred to in the preceding paragraph were not sufficient to constitute an examination made in accordance with generally accepted auditing standards, we do not express an opinion on any of the information or amounts listed under the caption Alternative I in the aforementioned letter. In performing the procedures referred to above, however, no matters came to our attention that caused us to believe that the information or amounts included in items 4, 5, 6, 7, 8, 10, 11 and 15 should be adjusted.

Yours truly,

*Deloitte Haskins & Sells*

APPENDIX A

ATT. 3

-13-

## APPENDIX A

### Attachment 4

#### List of Hazardous Waste

##### 1. Existing Liquid Waste Incinerator

D001	-	Waste resin
F003	-	Still sludge including xylene, ethyl benzene, methyl isobutyl ketone, and methanol
F005	-	Still sludge including toluene and methyl ethyl ketone

##### 2. Drum Storage Pad - Still Pad

D001	-	Waste resin
F002	-	Waste Methylene Chloride
F003	-	Incinerator Ash generated by the
F005	-	incineration of F003 and F005 wastes
U009	-	Waste resin and acrylonitrile
U223	-	Waste resin and toluene diisocyanate
U223	-	Polyether sump salts and toluene diisocyanate

Drums containing lab packs

Maximum Inventory - 800 drums

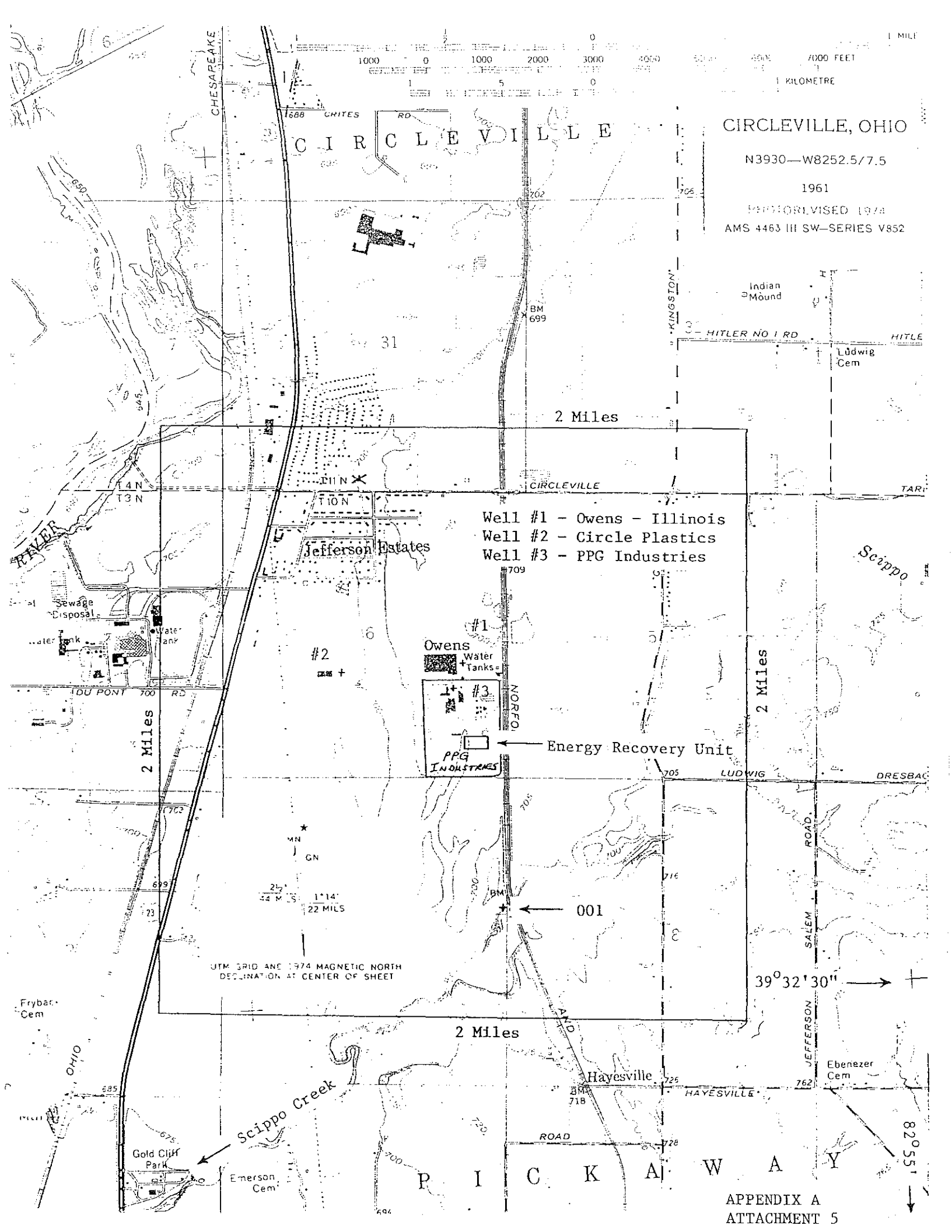
##### 3. Drum Storage Pad - West Pad (not operating since 1985)

Maximum Inventory - 0 drums

##### 4. Drum Storage Pad - South Pad

D001	Waste resin
------	-------------

Maximum Inventory - 200 drums



# CIRCLEVILLE, OHIO

N3930—W8252.5/7.5

1961

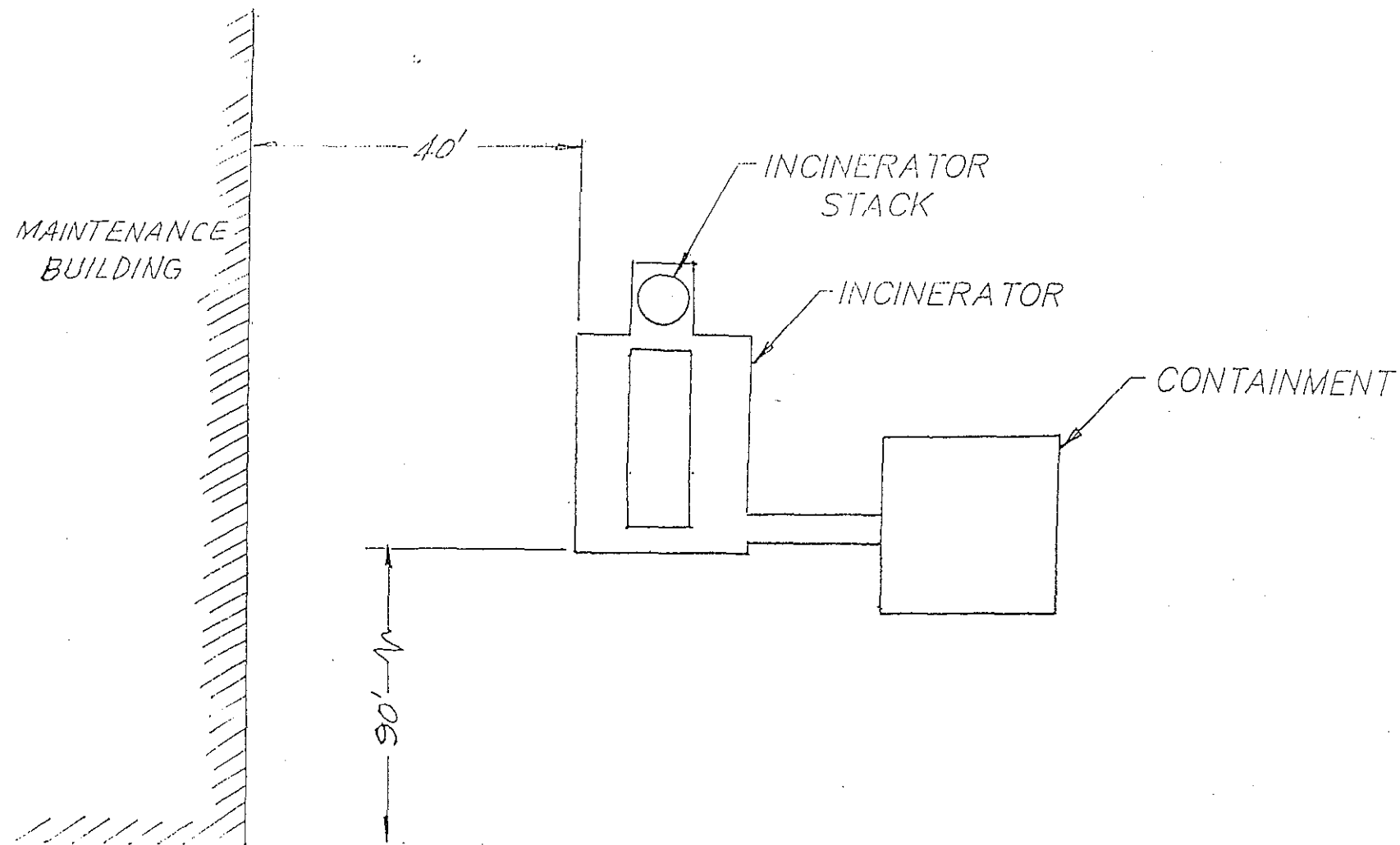
REVISIONS 1974  
AMS 4463 III SW-SERIES V852

- Well #1 - Owens - Illinois
- Well #2 - Circle Plastics
- Well #3 - PPG Industries

Energy Recovery Unit

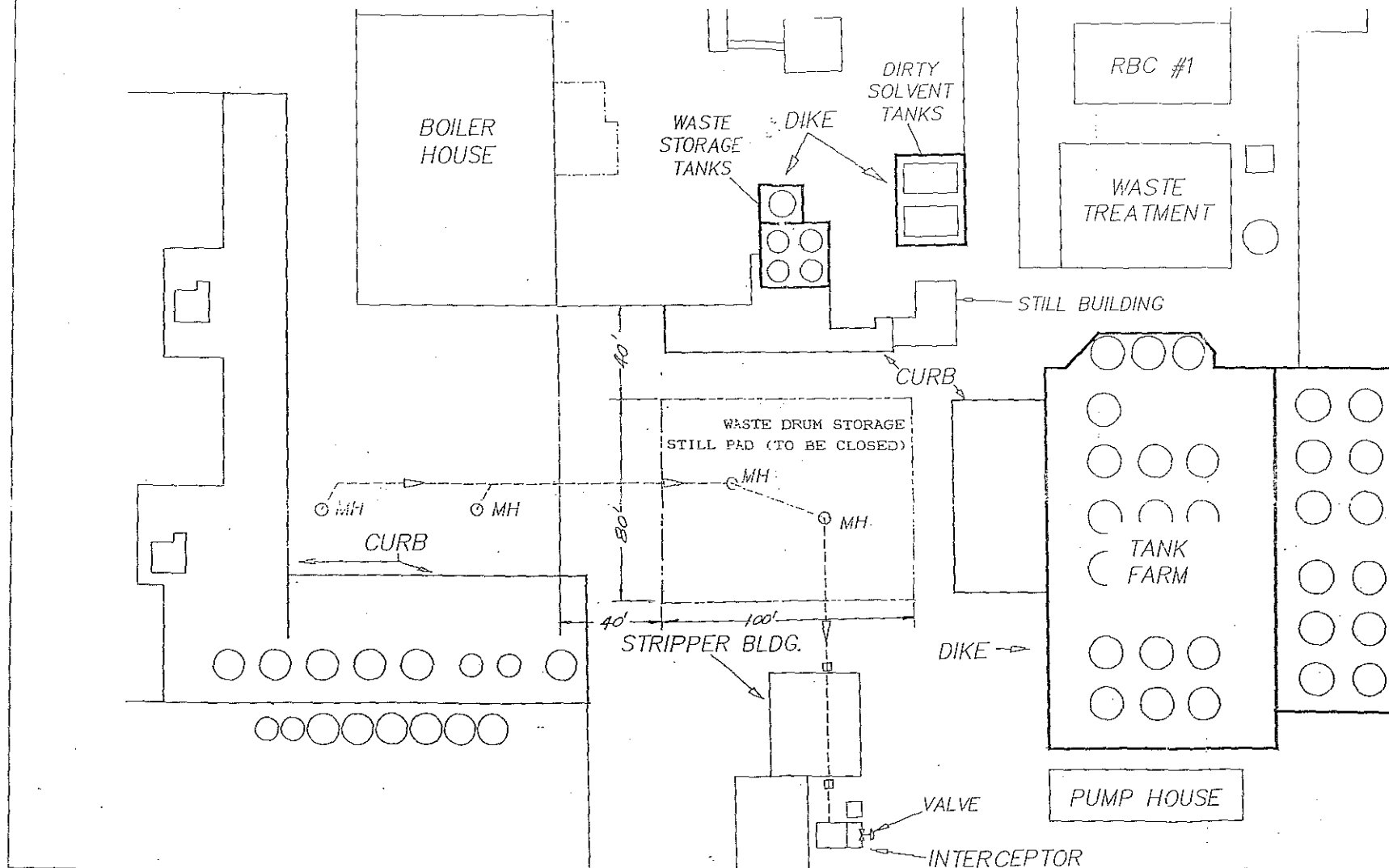
UTM GRID AND 1974 MAGNETIC NORTH  
DECLINATION AT CENTER OF SHEET

39°32'30"

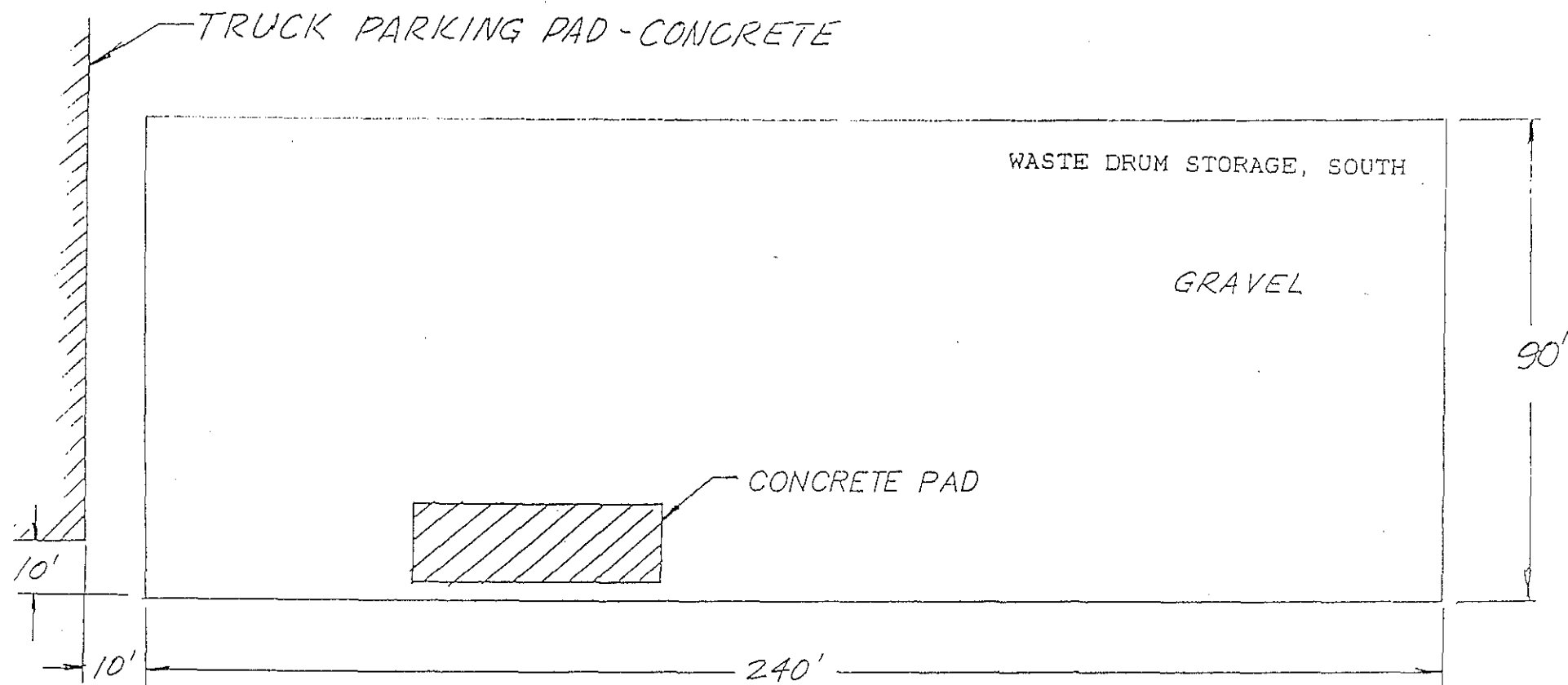


COATING & RESINS DIVISION	PPG INDUSTRIES	CIRCLEVILLE, OHIO	SCALE	1" = 20'
LIQUID WASTE INCINERATOR			DATE	5/4/87
(TO BE CLOSED.)			BY	D. BOERNER
			APPENDIX A	
			ATTACHMENT 7.A.	

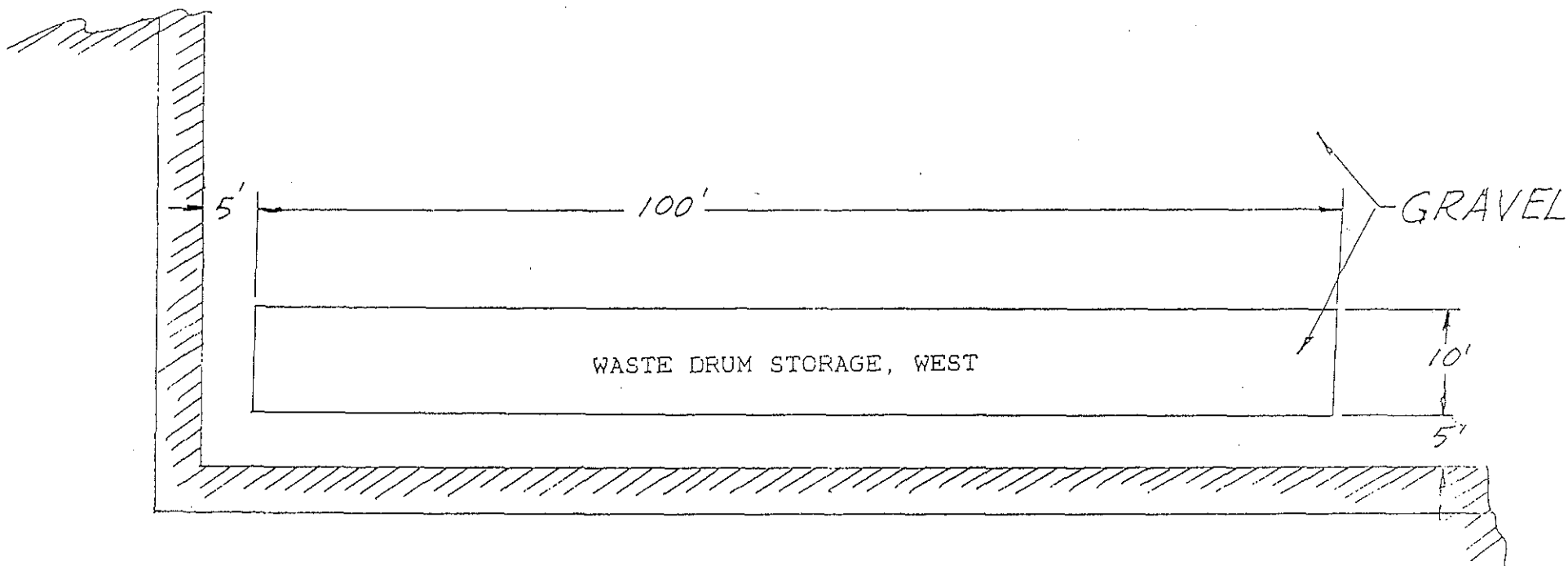
# HAZARDOUS WASTE AT A STILL CONTAINMENT



COATING & RESINS DIVISION	PPG INDUSTRIES	CIRCLEVILLE, OHIO	SCALE	1" = 40'
WASTE DRUM STORAGE - STILL PAD (TO BE CLOSED)			DATE	5/4/87
			BY	D. BOERNER
			APPENDIX A ATTACHMENT 7.B.	



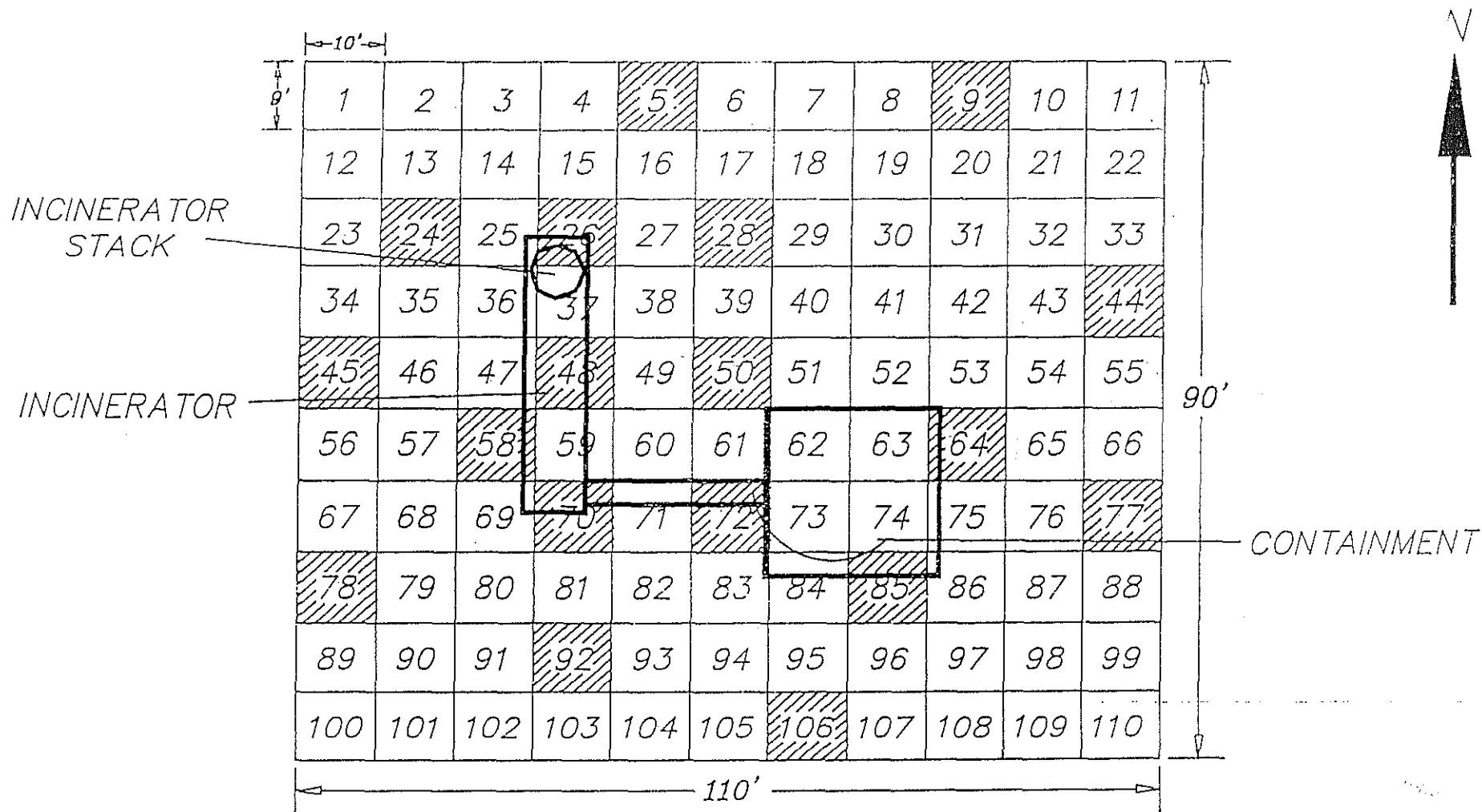
ATING & RESINS DIVISION	PPG INDUSTRIES	CIRCLEVILLE, OHIO	SCALE	1" = 30'
WASTE DRUM STORAGE - SOUTH PAD			DATE	5/4/87
(TO BE CLOSED)			BY	D. BOERNER
			APPENDIX A	
			ATTACHEMTN 7.C.	



TRAILER PARKING PAD - CONCRETE

COATING & RESINS DIVISION PPG INDUSTRIES CIRCLEVILLE, OHIO	SCALE 1" = 15'
WASTE DRUM STORAGE - WEST PAD (TO BE CLOSED)	DATE 5/4/87 BY D. BOERNER APPENDIX A ATTACHMENT 7.D.

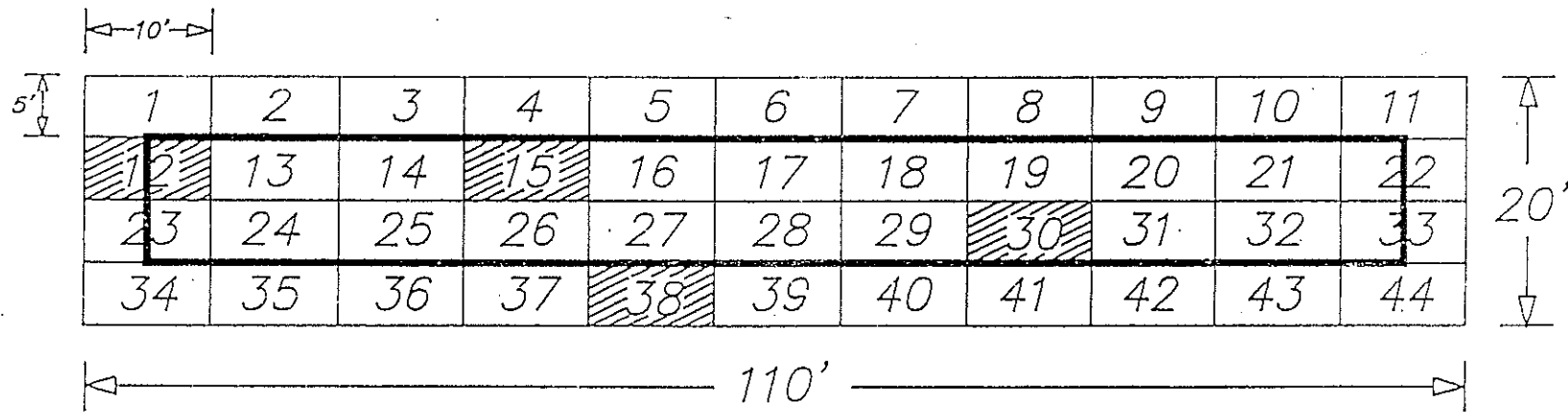




NOTE: EACH SAMPLE WILL BE TAKEN AT THE CENTER OF THE DESIGNATED AREA.

COATING & RESINS DIVISION	PPG INDUSTRIES	CIRCLEVILLE, OHIO	SCALE	1" = 20'
SOIL SAMPLING GRID FOR LIQUID WASTE INCINERATOR			DATE	5/4/87
CLOSURE - INCINERATOR AREA			BY	D. BOERNER
ACAD: INCIN1			APPENDIX A ATTACHMENT 8.A.	





NOTE: EACH SAMPLE WILL BE TAKEN AT THE CENTER OF THE DESIGNATED AREA.

DATING & RESINS DIVISION	PPG INDUSTRIES	CIRCLEVILLE, OHIO	SCALE	1" = 15'
SOIL SAMPLING GRID FOR LIQUID WASTE INCINERATOR			DATE	5/4/87
CLOSURE -- WEST PAD (10' X 100')			BY	D. BOERNER
ACAD: INCIN2			APPENDIX A ATTACHMENT 8.C.	

## ATTACHMENT #9

### Alternative Decontamination Procedures

#### A. Incinerator

Instead of removing the refractory brick and residue from the incinerator stack, hearth and breach as described in Paragraph 6; PPG would like to have the option of disposing of these components as a whole in a permitted hazardous waste landfill. The components would be considered hazardous waste and all refractory brick and residue would be secured prior to being transported for ultimate disposal.

#### B. Incinerator Organic Waste Feed Lines

As an alternative to the procedures described on pages 7 and 8, PPG would like to have the option of disposing of the feed lines as a whole depending on the build up of material inside the feed lines. If there is a substantial build up of material inside the organic feed lines, the solvent and water rinses will not be performed and the lines will be taken down and cut into sections. Each section will be considered hazardous waste and disposed of in a permitted hazardous waste landfill.

#### C. Incinerator Aqueous Waste Feed Line

As an alternative to the procedure described on page 9, PPG would like to have the option of disposing of the feed line as a whole depending on the build up of material inside the feed line. If there is a substantial build up of material inside the line, the water rinse will not be performed and the line will be taken down, cut into sections and considered a hazardous waste to be disposed of at a permitted hazardous waste facility.





PPG Industries, Inc.  
Post Office Box 457 Circleville, Ohio 43113 USA

Coatings and Resins

January 3, 1994



Mr. Donald R. Schregardus, Director  
Ohio Environmental Protection Agency  
P. O. Box 1049, 1800 Watermark Drive  
Columbus, OH 43266-0149

Re: Certification of Partial Closure  
PPG Industries, Inc., Circleville, OH  
EPA I. D. Number: OHD004304689

Dear Mr. Schregardus:

This letter is transmitting the Certification Document for closure of the following four hazardous waste management interim status units at the PPG Industries, Inc. (PPG) Circleville, OH plant: Liquid Waste Incinerator, the West Storage Pad, the South Storage Pad and the Still Pad.

Except for actual certification of all closure activities, the information required for closure documentation is included in the third revision of the Partial Closure Plan dated June 24, 1993 and submitted on June 25, 1993 to the Director, Central Office and Central District Office of Ohio EPA. The third revision and its accompanying cover letter with Attachment A (summary of March 1993 sampling results) summarize all decontamination, removal and sampling activities and incorporates all of Ohio EPA's comments which led to approval of the Closure Plan. Rather than enclose an additional copy of the June 25, 1993 submittal, we are instead referencing the pertinent sections of the Partial Closure Plan in the attached Certification Document to show that closure was completed in accordance with the Plan.

If you have questions or require copies of any of the referenced information, please feel free to contact me.

Very truly yours,

Bryant Riley  
Environmental Engineer

cc: Mr. Jeff Reynolds - OEPA - CDO w/attachments  
Mr. Mike Galbraith - USEPA w/attachments

**CERTIFICATION DOCUMENT  
FOR  
PARTIAL CLOSURE PLAN**

**PPG INDUSTRIES, INC.  
COATINGS AND RESINS PLANT  
P. O. Box 457  
Route 23, South  
Circleville, OH 43113**

**EPA I. D. Number: OHD004304689**

**December, 1993**

## CLOSURE CERTIFICATION

This document provides certification information that closure of four hazardous waste management interim status units at the PPG Industries, Inc. (PPG) Circleville, OH plant was implemented in accordance with the approved Partial Closure Plan. The units for which clean closure has been demonstrated are the former Liquid Waste Incinerator, the West Storage Pad, the South Storage Pad and the Still Pad.

Except for actual certification of all closure activities, the information required for closure documentation is included in the third revision of the Partial Closure Plan dated June 24, 1993 and submitted on June 25, 1993 to the Director, Central Office and Central District Office of Ohio EPA. The third revision and its accompanying cover letter with Attachment A (summary of March 1993 sampling results) summarize all decontamination, removal and sampling activities and incorporates all of Ohio EPA's comments which led to approval of the Closure Plan. Rather than enclose an additional copy of the June 25, 1993 submittal, the pertinent sections of the Partial Closure Plan are referenced in this Certification Document to show that closure was completed in accordance with the Plan.

Per the Closure Plan Review Guidance by Ohio EPA, the following information is provided to demonstrate completion of closure:

- (1) THE CERTIFICATION STATEMENT  
The certification statement by PPG is included as Attachment A to this document. The certification statements by the registered, professional engineer are included in Attachment B.
- (2) THE APPROVED CLOSURE PLAN OR REFERENCE TO THE APPROVED PLAN  
Reference is made to the "Partial Closure Plan Prepared for PPG Industries, Inc., Circleville, Ohio", dated June 24, 1993 and its accompanying cover letter with Attachment A prepared by ICF Kaiser Engineers. Although closure activities were initially performed in 1989, the amended Partial Closure Plan was approved by the OEPA Director on June 11, 1993.
- (3) THE VOLUME OF WASTE REMOVED OR CLOSED IN PLACE  
See Table 12.1 of the Partial Closure Plan, Revision 3, dated June 24, 1993.
- (4) ALL CORRESPONDENCE REGARDING CLOSURE ACTIVITY AFTER OHIO EPA APPROVAL  
See Chapter 6 of the Partial Closure Plan, Revision 3, dated June 24, 1993.
- (5) DETAILS OF SAMPLING AND ANALYSIS ACTIVITIES  
See Chapters 9 and 11 and Attachments C and H of the Partial Closure Plan, Revision 3, dated June 24, 1993.



(6) LABORATORY RECORDS

See Attachments A and B of the Partial Closure Plan, Revision 3, dated June 24, 1993.

(7) A NARRATIVE DESCRIBING ALL ACTIVITIES DURING CLOSURE

Briefly, closure activities included:

- Liquid Waste Incinerator: All residues were removed and the incinerator hearth, breeching, stack refractory, and base were dismantled for disposal in Chemical Waste Management's RCRA landfill in Fort Wayne, IN. Rinseate sampling and analysis was done to confirm successful decontamination of the incinerator equipment and to determine rinseate disposal requirements. Soil sampling was conducted in 1989, 1992 and 1993 to define the full extent of potential contamination from the unit. A risk assessment demonstration of clean closure indicated that noncancer hazards and theoretical excess lifetime cancer risks for this unit are below the limits established in the Closure Plan Review Guidance Manual by OEPA.
- West Storage Pad: Samples obtained in 1989 of this gravel area indicated that the existing soils met the requirements for clean closure. As a result, no material was removed from this area during initial closure activities. Additional soil sampling performed in 1992 showed no detectable concentrations of VOCs at the 12-24 inch depth. A risk assessment demonstration of clean closure indicated that noncancer hazards and theoretical excess lifetime cancer risks for this unit are below the limits established in the Closure Plan Review Guidance Manual by OEPA.
- South Storage Pad: The concrete pad was removed and disposed in Chemical Waste Management's RCRA landfill in Fort Wayne, IN. Soil samples were obtained in 1989, 1992 and 1993 to define the full extent of potential contamination from the unit. A risk assessment demonstration of clean closure indicated that noncancer hazards and theoretical excess lifetime cancer risks for this unit are below the limits established in the Closure Plan Review Guidance Manual by OEPA.
- Still Pad: This pad was decontaminated with high pressure water. Rinseate sampling and analysis was done to confirm successful decontamination of the Pad concrete and to determine rinseate disposal requirements. The decontaminated pad was later removed during a PCB remediation and spill containment project at the site. Although the concrete was non-hazardous, it was disposed in Chemical Waste Management's RCRA landfill in Fort Wayne, IN. Documentation has been provided to show that the presence of constituents of concern in subsurface soils are not related to RCRA management activities at the Still Pad.

For additional details on the closure activities, please refer to the Partial Closure Plan, Revision 3, dated June 24, 1993.

- (8) DETAILS, INCLUDING AS-BUILT DRAWINGS, FOR LANDFILL CLOSURES  
Since none of the four units closed included a landfill, this information is not applicable.
- (9) POST-CLOSURE CLEAN-UP DOCUMENTATION  
Since clean closure of the four units has been demonstrated, post-closure care is not required.
- (10) SIGNATURE OF OWNER/OPERATOR AND OF A QUALIFIED, INDEPENDENT, REGISTERED, PROFESSIONAL ENGINEER  
The signature by PPG on the certification is included in Attachment A. Signatures on the certifications by the registered, professional engineer are included in Attachment B.

Attachment B consists of two signatures: 1) Certification of Closure by a registered, professional engineer representing O. H. Materials Corp. who directed the initial closure, decontamination and soil sampling activities in 1989 and 2) Certification of Closure by a registered, professional engineer representing ICF Kaiser Engineers, Inc. who concluded the closure activities.

**ATTACHMENT A  
OWNER CERTIFICATION OF CLOSURE**

## OWNER CERTIFICATION OF CLOSURE

PPG Industries, Inc. (PPG) certifies that the Liquid Waste Incinerator, the West Storage Pad, the South Storage Pad and the Still Pad at the PPG Circleville, OH plant have been closed in accordance with the facility's approved Partial Closure Plan:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

  
Signature

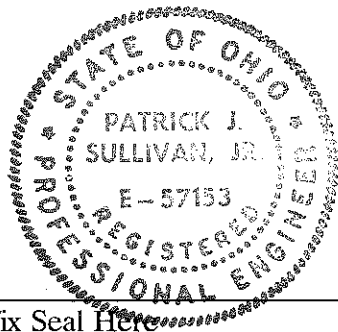
1/3/94  
Date

PLANT MANAGER  
Title

**ATTACHMENT B**  
**PROFESSIONAL ENGINEER CERTIFICATION OF CLOSURE**

PROFESSIONAL ENGINEER CERTIFICATION OF CLOSURE

I, Patrick J. Sullivan, Jr., a registered professional engineer in the state of Ohio, hereby certify that I have reviewed the approved RCRA partial closure plan dated June 24, 1993 and documentation related to closure activities for four hazardous waste management units at PPG Industries, Inc.'s facility in Circleville, Ohio. The four units closed were interim status units known as the former Liquid Waste Incinerator, West Storage Pad, South Storage Pad and Still Pad. I further certify, per OAC 3745-66-15, that to the best of my knowledge and belief, the closure activities completed under my or my designee's supervision were completed in accordance with the approved partial closure plan. For those initial closure activities not completed under my or my designee's supervision, I have reviewed the documentation for these activities and certify that the documentation indicates the work was completed in accordance with the approved partial closure plan.



Affix Seal Here

Patrick J. Sullivan, Jr.  
Signature

December 21 1993  
Date

Patrick J. Sullivan, Jr. P.E.  
ICF Kaiser Engineers  
Four Gateway Center  
Pittsburgh, PA 15222  
(412) 497-2584

E-57153  
Professional Engineer License Number

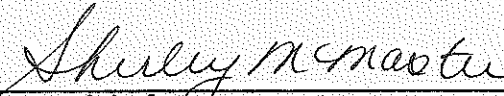
Ohio  
For State of

REPORT OF CLOSURE  
ACTIVITIES AND CERTIFICATION  
OF CLOSURE FOR PPG'S  
CIRCLEVILLE, OHIO, FACILITY

Submitted to:

PPG Industries, Inc.  
Circleville, Ohio

O.H. Materials Corp.

A handwritten signature in cursive script, reading "Shirley McMaster", is written over a horizontal line.

Shirley McMaster, P.E.  
Senior Project Engineer

November 17, 1989  
Project 7137

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## 1.0 INTRODUCTION

PPG Industries, Inc. (PPG) is undergoing closure of four RCRA hazardous waste management units. These units are:

- o Still Pad Drum Storage Area
- o South Pad Storage Area
- o West Drum Storage Area
- o Liquid Waste Incinerator Area

PPG is in the process of revising the closure plan for submittal to the Ohio Environmental Protection Agency (Ohio EPA) for final approval.

At PPG's discretion, certain closure activities have taken place prior to the final submittal and subsequent approval of the closure plan. PPG has kept the Ohio EPA advised as to when the closure activities would take place; also, all of Ohio EPA's comments on the closure plan made during the appeal process were taken into account during closure activities. These closure activities have been completed. This report describes these activities and includes the engineering Certification of Closure (see Appendix A).

## 2.0 SCOPE OF WORK

OHM was contracted to perform the following tasks:

- o Still Pad Drum Storage Area
  - Wash and rinse the pad
  - Collect and drum the rinsewater
  - Sample and analyze the final rinsate
  - Sample and analyze sediment in two grated cover manholes
  - Provide the professional engineer's Closure Certification
- o South Pad and West Drum Storage Areas
  - Sample and analyze area soils
  - Remove all concrete pads
  - Provide the professional engineer's Closure Certification
- o Liquid Waste Incinerator Area
  - Dismantle the incinerator
  - Sample and analyze area soils
  - Sample and analyze the rinsates from flushing the organic waste and aqueous waste feed lines
  - Remove all concrete pads
  - Provide the professional engineer's Closure Certification

### 3.0 METHODS

The following sections describe closure activities and analytical methods.

#### 3.1 STILL PAD DRUM STORAGE AREA

The Still Pad Area was an uncurbed concrete pad approximately 80 feet by 100 feet. There were two grated sewer inlets and two sealed sewer manholes located within the pad area.

OHM operations personnel and the professional engineer mobilized to the site on April 17, 1989. There were no drums on the pad. PPG had previously scarified the top 1/4-inch of the pad. This material was placed into 55-gallon drums and disposed of in Chemical Waste Management of Indiana's TSD facility in Fort Wayne, Indiana (ADAMS CENTER).

OHM installed temporary foam curbing around the pad perimeter and the four sewer inlets. The pad was washed twice with an industrial cleaner and rinsed three times with high pressure water lasers. The rinsewater was collected with wet/dry vacuums and placed in drums. Each of the three rinses were placed in separate drums.

At the completion of the third rinse, the foam was removed and placed in separate drums. In all, 15 drums of liquids and solids were generated:

- o First rinse--three drums
- o Second rinse--four drums
- o Third rinse--three drums
- o Foam dike--four drums
- o Trash, protective clothing--one drum

Samples of the three drums of the third rinse were obtained for analyses. A separate 4 foot long dip tube was used for each drum to ensure sampling of the entire drum contents. Each sample container was filled with equal volumes from each drum.

A sample was also obtained from the plant water used as the rinsewater source. The sample was taken from a tap in the Still House.

OHM also obtained sediment grab samples from the bottom of the two grated cover manholes.

Clean glass containers with Teflon-lined lids were used for all samples. Chain-of-custody forms accompanied all samples.

All 15 drums of rinsate and debris were incinerated on site at the hazardous-waste incinerator.

### 3.2 SOUTH PAD STORAGE AREA

The South Pad is a gravel area, approximately 90 feet by 240 feet. There is a curbed concrete pad, approximately 15 feet by 45 feet located on the south side of the area.

OHM sampling personnel mobilized to the site on July 17, 1989, to perform soil sampling on the South Pad Storage Area, the West Drum Storage Area, and the Liquid Waste Incinerator Area.

Using a grid established by PPG, and the edge of an existing concrete pad as the western boundary of the South Pad, OHM located the sample points. A sample was taken from the center of each box shown as shaded on Figure 3.1.

A power auger was used to remove the top 4 to 6 inches. The loose soil was removed and a grab sample collected using a tongue depressor where necessary to loosen the soil. The samples were placed in clean glass 40 milliliter (ml) vials with Teflon septa.

The power auger bit was decontaminated using a soap and water wash and distilled water rinse between each location.

The sample gloves and tongue depressors were discarded after each location. All samples were labeled and transferred to the laboratory in coolers. Chain-of-custody forms accompanied all samples.

The holes were backfilled after the sample had been obtained. The decontamination water was placed in one drum, and trash and debris placed in another drum.

On November 7, 1989, the concrete containment pad was broken up, removed, and transported to ADAMS CENTER.

### 3.3 WEST DRUM STORAGE AREA

The West Drum Storage Area is a gravel area, approximately 10 feet by 100 feet.

Using a grid supplied by PPG and an existing monitoring well as the northwest corner of the area, OHM located the sample points. These points are shown in Figure 3.2.

The samples were obtained in a fashion similar to that described in Section 3.2 for the South Pad Storage Area.

### 3.4 LIQUID WASTE INCINERATOR AREA

The liquid waste incinerator has been taken out of service.



PLOT SCALE: 1" = 1"

OHM CORPORATION PITTSBURGH, PA	DRAWN BY BBO/JA 8-30-89	CHECKED BY Smsn 11/10/89	APPROVED BY Smsn 11/10/89	DRAWING NUMBER 7137--A3
	DRAWN BY C.MERRIN 11-10-89			

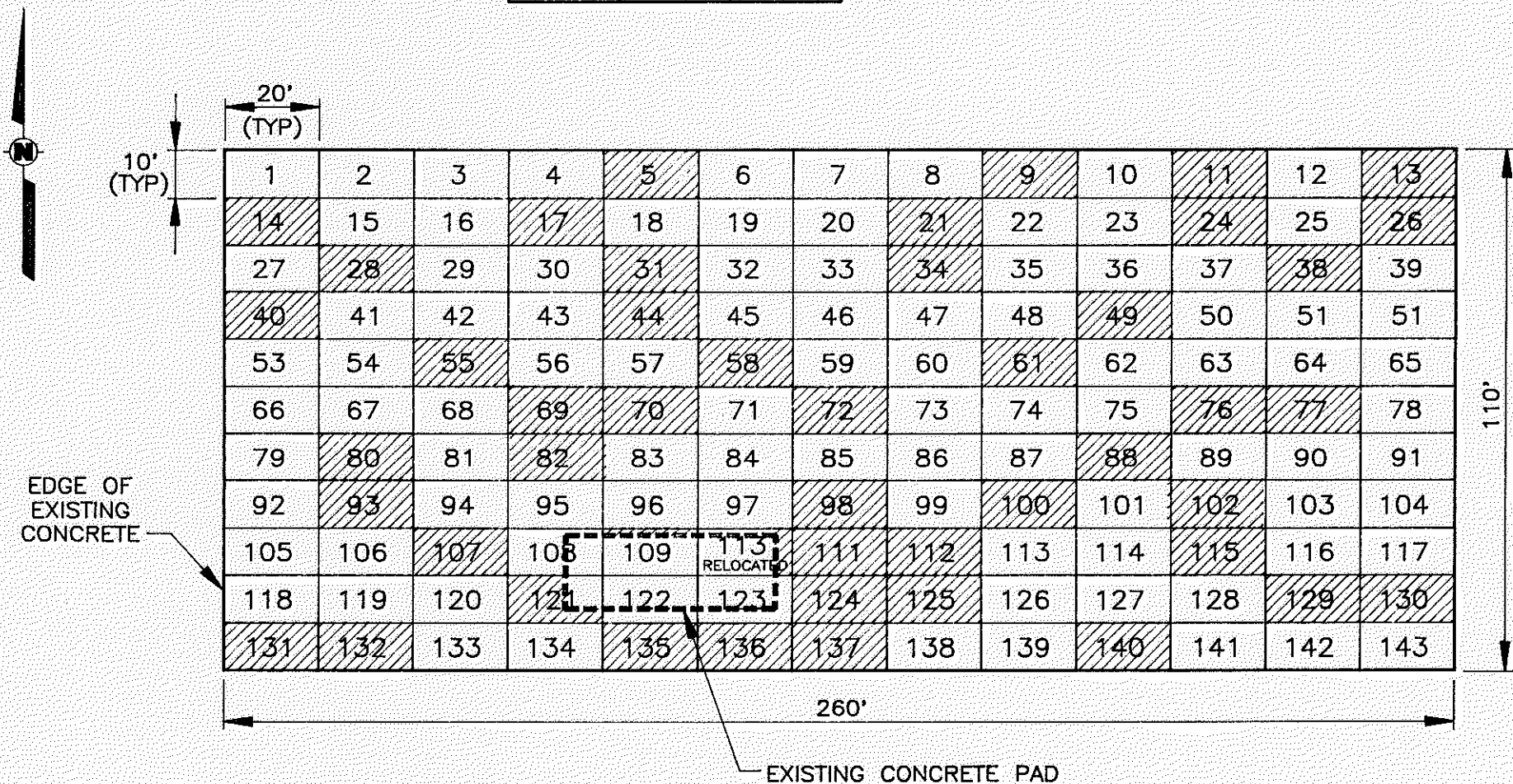


FIGURE 3.1  
SOUTH PAD  
SAMPLE LOCATION MAP  
PREPARED FOR

PPG INDUSTRIES  
CIRCLEVILLE, OHIO

PLOT SCALE: 1" = 1"

OHM CORPORATION PITTSBURGH, PA	DRAWN BY J ABRAMS 8-30-89	CHECKED BY SMYK 11/10/89	APPROVED BY SMYK 11/10/89	DRAWING NUMBER 1137-A1
REV. BY C.MERRIN	11-10-89			

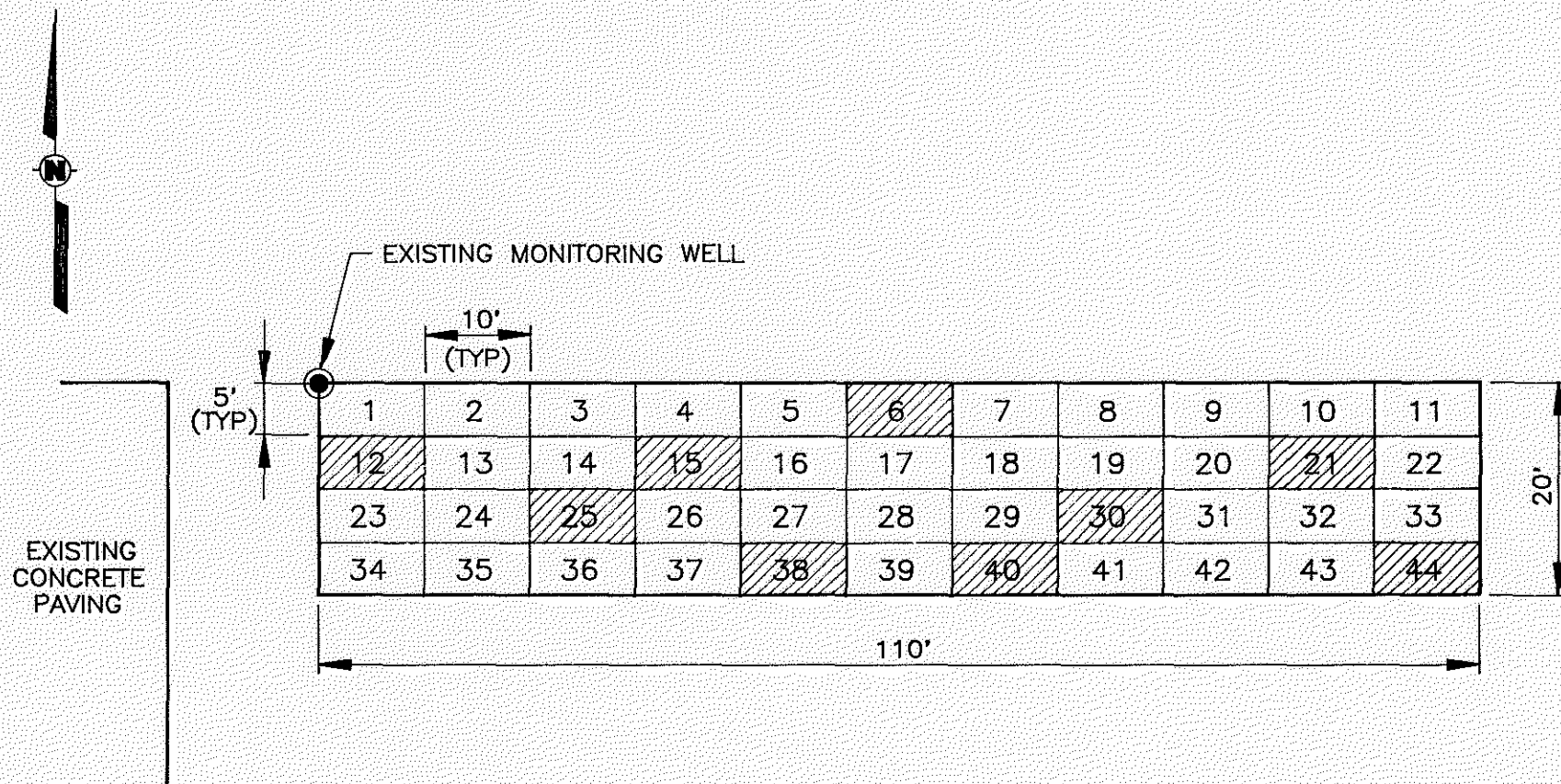


FIGURE 3.2  
WEST PAD  
SAMPLE LOCATION MAP  
PREPARED FOR  
PPG INDUSTRIES  
CIRCLEVILLE, OHIO

On June 5, 6, and 7, 1989, OHM dismantled the incinerator hearth, breech, and stack, and loaded them into trucks for transport to ADAMS CENTER.

#### 3.4.1 Soil Sampling

An area surrounding the incinerator pad was selected for soil sampling. The incinerator occupied a concrete pad approximately 10 feet by 40 feet along with a 20 foot square concrete containment area. The area to be sampled was 90 feet by 110 feet.

Using PPG's sampling grid, OHM located the sample points shown on Figure 3.3. The northwest corner of the area was selected 23 feet north and 29 feet west of the corner of the incinerator pad. Three samples were relocated in the field: Location 9 was moved south and east to avoid an existing equipment pad; Location 48 was moved east off the incinerator pad; Location 78 was moved east outside an electrical substation.

All soil sampling activities were similar to those described in Section 3.2, South Pad Storage Area.

#### 3.4.2 Line Flushing

There were three pipelines at the Liquid Waste Incinerator that carried hazardous materials. Two of the lines were designated as organic waste feed lines and the other as an aqueous waste feed line. The lines were flushed and drained when the incinerator was taken down. The lines were to be flushed again as part of the closure activities.

OHM's professional engineer was on site on August 24, 1989, to witness the flushing and obtain rinsate samples.

The two organic feed lines were flushed first. A recycle line on the pipe rack was used to recirculate the solvent solution. For each organic line, solvent was circulated at least three times and then sent to PPG's on-site hazardous-waste incineration facility.

Following the solvent flushing, service water was used for the final flushing. Three rinses with clean water were performed. Each rinse was segregated in a separate drum and sent to the on-site incinerator.

The aqueous waste line was flushed three times with deionized water. Each rinse was segregated in a separate drum and incinerated on site.

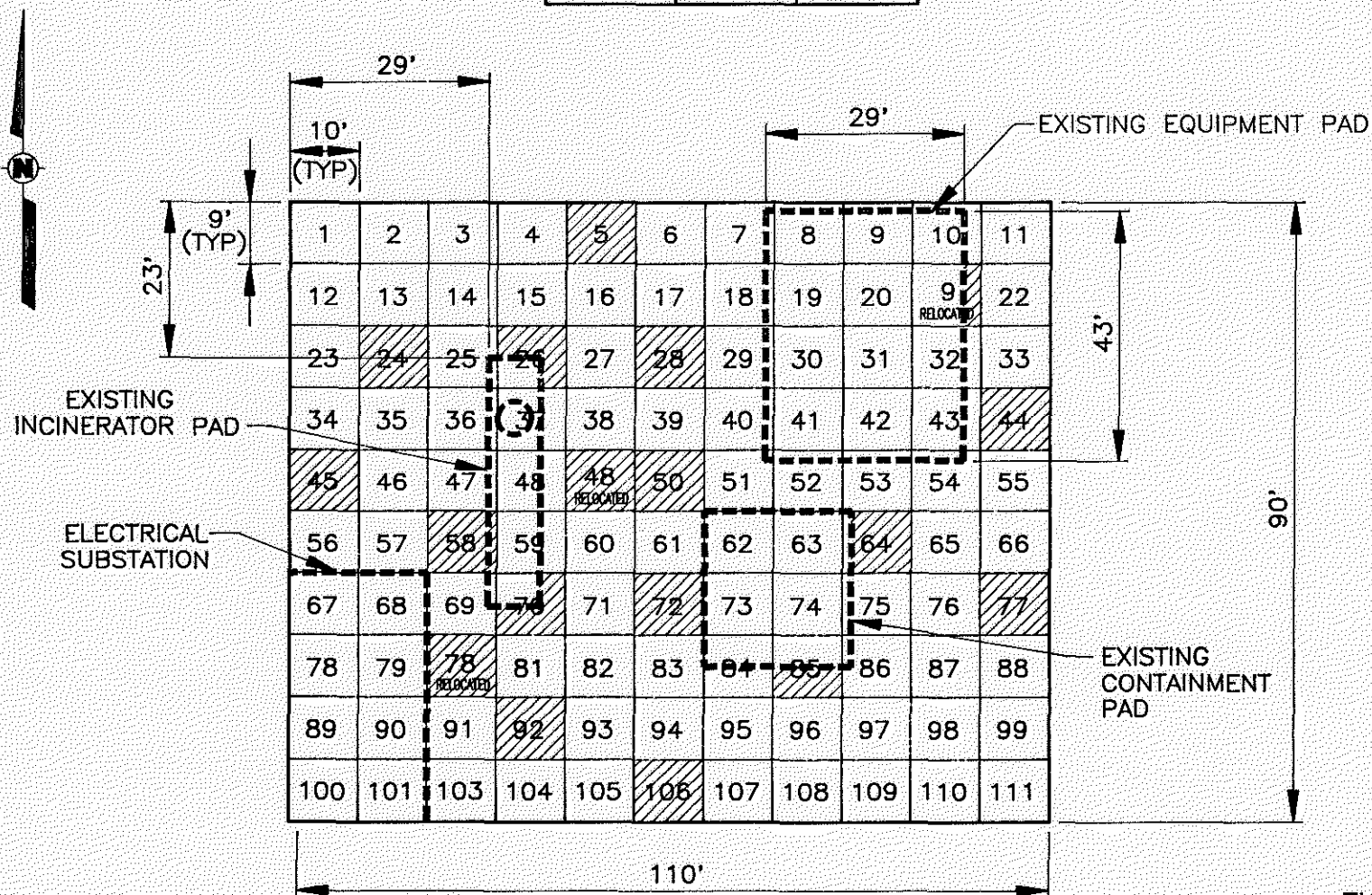


FIGURE 3.3  
INCINERATOR AREA  
SAMPLE LOCATION MAP

PREPARED FOR

PPG INDUSTRIES  
CIRCLEVILLE, OHIO



The three final rinsewaters were sampled. Four-foot long dip tubes were used to ensure a representative sample was obtained from each drum. Samples were also taken from the hose used to supply the service water and a drum of the clean deionized water. The samples were placed in clean glass jars with Teflon-lined lids. Clean dip tubes and sample gloves were used to take each sample. The containers were held in coolers during transport to the laboratory. Chain-of-custody forms accompanied all samples.

#### 3.4.3. Concrete Removal

On November 7 and 8, 1989, OHM removed the concrete incinerator pad and containment. The footings for the incinerator pad were removed to a few inches below grade. The concrete was transported to ADAMS CENTER.

### 3.5 ANALYTICAL METHODS

All the samples obtained (soils, rinsates, and source waters) were analyzed for F003 and F005 solvents using the following methods:

- o Alcohols--Samples were prepared and analyzed according to USEPA Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods, EPA SW-846, 2nd edition, July 1982; Method 5030, Purge and Trap, and Method 8015, Nonhalogenated Volatile Organics.
- o Volatile Priority Pollutants--Samples were prepared and analyzed according to USEPA Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods, SW-846, 3rd edition, September 1986; Method 8240, GC/MS Method for Volatile Organics.

The final rinsate at the Still Pad Storage Area was also analyzed for methylene chloride and acrylonitrile by the above methods and for PCBs by the following method:

- o PCBs--The water sample was prepared and analyzed according to USEPA Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater, July 1982; Method 608, Pesticides and PCBs.

The soil samples at the South Pad Storage Area, West Drum Storage Area, and the incinerator area were composited and analyzed for PCBs according to the following method:

- o USEPA Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods, SW-846, 2nd edition, July 1982; Method 3550, Sonication or Method 3540, Soxhlet Extraction and Method 8080, Organochlorine Pesticides and PCBs.

The samples at the South Pad were composited into two samples--one encompassing samples S-131, 003 through 14, and 016 through 026; the other samples 027 through 032, and 034 through 051. The 18 nonduplicate samples at the West Drum Storage Area were composited into one sample and the nine nonduplicate samples at the incinerator area were composited into one sample.

The composite soil sample from the incinerator area was analyzed for the following:

- o Polychlorinated Dibenzo-P-Dioxins and Furans, namely 2,3,7,8-TCDD and 2,3,7,8-TCDF--Sample was prepared and analyzed according to USEPA Methods for Evaluating Solid Wastes, Physical/Chemical Methods, SW-846, 3rd edition, November 1986; Method 8280, GC/MS Method for Polychlorinated Dibenzo-P-Dioxins and Furans.

## 4.0 RESULTS

The following paragraphs discuss the results of the closure activities.

### 4.1 STILL PAD DRUM STORAGE PAD

Of the F003 and F005 solvents analyzed, none were detected in the still pad final rinsate sample. There were no PCBs, acrylonitrile, or toluene diisocyanate detected in the final rinsate. Methylene chloride was detected at 169 parts per billion (ppb).

The rinsate was sent to PPG's Circleville incineration facility. The concrete pad was demolished and sent to ADAMS CENTER. The drums of debris from the scarification of the pad were also sent to ADAMS CENTER.

### 4.2 SOUTH PAD STORAGE AREA

The results of the F003 and F005 analyses on the 50 soil samples have been summarized in Table 4.1. Only those 16 sample points which had detectable concentrations are shown in the table. One composite sample had 0.334 ppm PCBs, the other 3.56 ppm PCBs. These soils will be addressed at a future time.

### 4.3 WEST DRUM STORAGE AREA

A total of 10 samples were taken at the West Drum Storage Area. The F003 and F005 solvent concentrations have been summarized in Table 4.2. There were only four locations which had detectable concentrations. There were no PCBs detected in the composite sample. The soils in these areas will be addressed at a future time.

### 4.4 LIQUID WASTE INCINERATOR AREA

There were 19 soil samples taken at the incinerator area. Detectable F003 and F005 concentrations have been summarized in Table 4.3. Only nine locations were above detection limits. There was 1.79 ppm PCBs detected in the composite sample. There was 0.15 ppb of 2,3,7,8-TCDF present in the composite sample while the 2,3,7,8-TCDD was below detectable limits. The soils at these locations will be addressed at a future time.

The rinsate sample analyses for the aqueous waste and organic waste feed lines are summarized in Table 4.4. Detectable concentrations of several F003 and F005 solvents were present in all three final rinsates. The pipe was dismantled; no solids or residue were visible in the pipes. The pipes were sent to ADAMS CENTER for disposal.

TABLE 4.1  
F003 AND F005 SOLVENTS  
ANALYTICAL SUMMARY  
SOILS - SOUTH PAD STORAGE AREA

Compounds Detected (ppm)

Sample Number	Location	Toluene	Total Xylenes	Ethylbenzene
S-131	S-131	2	BDL	BDL
004	S-135	BDL	0.11	BDL
005	S-136	0.8	BDL	BDL
010	S-125	0.4	BDL	BDL
013	S-107	0.4	BDL	BDL
015	S-109	BDL	0.6	BDL
018	S-112	0.4	BDL	BDL
021	S-100	21	8	2
024	S-80	0.5	BDL	BDL
025	S-88	2	BDL	BDL
028	S-76	17	BDL	0.3
029	S-72	BDL	BDL	0.4
031	S-69	1	1.8	0.3
034	S-58	0.3	BDL	BDL
035	S-61	0.3	BDL	BDL
038	S-40	0.4	BDL	BDL
Detection Limit	N/A	0.3	0.3	0.3

BDL = Below Detection Limit

TABLE 4.2  
F003 AND F005 SOLVENTS  
ANALYTICAL SUMMARY  
SOILS - WEST PAD STORAGE AREA

Compounds Detected (ppm)

Sample Number	Location	Methanol	Toluene	Ethylbenzene	m+p-Xylene	o-Xylene
053	W-44	0.988	1.34	BDL	BDL	BDL
057	W-06	BDL	BDL	0.229	1.14	1.02
058	W-38	BDL	0.621	BDL	BDL	BDL
061	W-12	BDL	BDL	BDL	0.225	0.229
Detection Limit	N/A	.988	.19	.19	.19	.19

BDL = Below Detection Limit



TABLE 4.3  
F003 AND F005 SOLVENTS  
ANALYTICAL SUMMARY  
SOILS - INCINERATOR AREA  
Compounds Detected (ppm)

Sample Number	Location	Ethylbenzene	Total Xylenes
066	I-64	0.3	0.9
067	I-85	0.6	0.7
070	I-72	BDL	1.7
072	I-70	BDL	BDL
077	I-24	2	4
078	I-28	BDL	BDL
079	I-48	BDL	0.4
080	I-45	0.6	2
081	I-50	BDL	BDL
Detection Limit	N/A	0.3	0.3

BDL = Below Detection Limit

TABLE 4.4

F003 AND F005 SOLVENTS  
ANALYTICAL SUMMARY  
LIQUIDS - INCINERATOR AREA

Concentration (ppm)						
<u>Item</u>	<u>Methanol</u>	<u>Isobutanol</u>	<u>Butanol</u>	<u>Ethyl- benzene</u>	<u>Toluene</u>	<u>Total Xylenes</u>
Organic Waste Line 1	16.5	1.71	18.9	24	33	180
Organic Waste Line 2	93.1	10.1	85.3	36	75	240
Aqueous Waste	BDL	BDL	BDL	9.9	15	31
Service Water	BDL	BDL	BDL	BDL	BDL	BDL
Deionized Water	BDL	BDL	BDL	BDL	.17*	BDL
Detection Limit	1.0	1.0	1.0	0.5	0.5	0.5

\*Detection Limit - 5 parts per billion

## 5.0 CONCLUSIONS

The closure activities completed to date have been consistent with the specifications set forth in Ohio Administrative Code 3745-66-12 and the Ohio Environmental Protection Agency's Draft Closure Plan Review Guidance dated February 8, 1988.

The Certificate of Closure is found in Appendix A.



**APPENDIX A**  
**CERTIFICATION OF CLOSURE**

CERTIFICATION OF CLOSURE

PPG Industries, Inc.  
559 Pittsburgh Road  
Circleville, OH

OHD 004304689

I hereby certify that the closure activities described herein  
were completed and are consistent with the requirements of  
OAC 3745-66-12.

11/17/89

Date

Shirley McMaster

Shirley McMaster, P.E.  
Ohio No. 50331



**ATTACHMENT A**  
**SOIL SAMPLING AND ANALYSIS SUMMARY**  
**PARTIAL RCRA CLOSURE**

**1.0 Introduction**

In March, 1993, PPG Industries, Inc. (PPG) conducted soil sampling at the Company's Coatings and Resins facility in Circleville, Ohio to fulfill the requirements of a conditionally approved Partial Closure Plan for four interim status hazardous waste management units. The sampling program was performed to satisfy two specific objectives: 1) To fully define the vertical extent of methylene chloride contamination at locations where detectable concentrations of this constituent were identified in previous sampling events, and 2) To collect samples from locations where the highest concentrations of constituents of concern were previously identified and subject the samples to TCLP leachate analysis procedure. These data are intended to provide real data determining the potential for soil contamination to migrate to groundwater. The following pages present a description of the sampling program and the results obtained.

**2.0 Sampling Activities**

On March 24, 1993, ICF Kaiser Engineers mobilized to the site and re-established the sampling grid systems for the Former Liquid Waste Incinerator Pad and the South Pad Drum Storage Areas. Specific grid coordinates were established to collect samples at the following locations:

- |   |                                     |                 |
|---|-------------------------------------|-----------------|
| ■ | Former Liquid Waste Incinerator Pad | Grids 24 and 45 |
| ■ | South Pad Drum Storage Area         | Grid 76 and 100 |

These sampling locations are illustrated in Figures 1 and 2. Samples were collected at a depth of 0-6" below surface grade at each of the above locations for TCLP analysis using a stainless steel bucket auger. Samples were collected at depths of 24"-36", 36"-48", and 48"-60" below surface grade at all locations except for Grid 76 at the South Pad Drum Storage Area using the same methodology as previous sampling events (i.e. a stainless-steel split spoon sampler manually driven to the desired sampling depths). All sampling equipment was decontaminated between sample locations with a mild detergent followed by a deionized water rinse.

Approximately 4 oz. of material was collected from each bucket auger or split spoon for analysis. The sample was obtained by withdrawing the appropriate amount of soil from the sampling equipment with stainless steel spatulas. Labels detailing, the name of the sampler, date, time, method of analysis and any preservatives were marked on the sampling jar. The samples were then placed on ice for shipment to the analytical laboratory.

**3.0 Sample Analysis**

All soil samples were sent by overnight courier to NET, Cambridge Division in Bedford, Massachusetts for analysis. Soil samples collected from the 0-6" interval were subjected to the TCLP extraction procedure using EPA SW-846 Method 1311. Resulting TCLP leachates were analyzed for ethylbenzene, methyl isobutyl ketone (MIBK), methylene chloride, toluene and xylenes using EPA SW-846 Method 8240. Soil samples collected from deeper intervals as well as an equipment blank and a trip blank were analyzed for methylene chloride by EPA SW-846 Method 8240.

#### **4.0 Sample Results**

None of the constituents of concern were detected in the TCLP leachates generated from the 0-6" samples from the grid locations previously exhibiting the highest concentrations of these constituents. Exhibit 1 presents the complete report of TCLP results. Additionally, none of the samples collected at depth contained detectable concentrations of methylene chloride. Exhibit 2 presents the complete analytical report for these samples.

#### **5.0 Summary**

Based on the results obtained from the sampling conducted by PPG in March, 1993, the vertical extent of methylene chloride contamination has been determined at Grid Locations 24 and 45 at the Former Liquid Waste Incinerator Area and at Grid Location 100 at the South Pad Drum Storage Area. Additionally, none of the constituents of concern were shown to leach from the soil at detectable levels using the TCLP leachate procedure. Substituting these TCLP data for fate and transport modelling will eliminate the groundwater exposure pathway from the risk assessment.




ND= NON DETECT  
 NA= NOT ANALYZED  
 ug/kg = MICROGRAMS/KILOGRAMS  
 ND/NA= 6"-12" INTERVAL/12"-24" INTERVAL

JOB NO.: 0451200100

PLOT SCALE: 1"=20'

STARTED ON: 6/23/93

REVISED: 00/00/00

-  PREVIOUS (1989) SAMPLE LOCATION
-  PREVIOUS (1992) SAMPLE LOCATION
-  PREVIOUS/CURRENT SAMPLE LOCATION

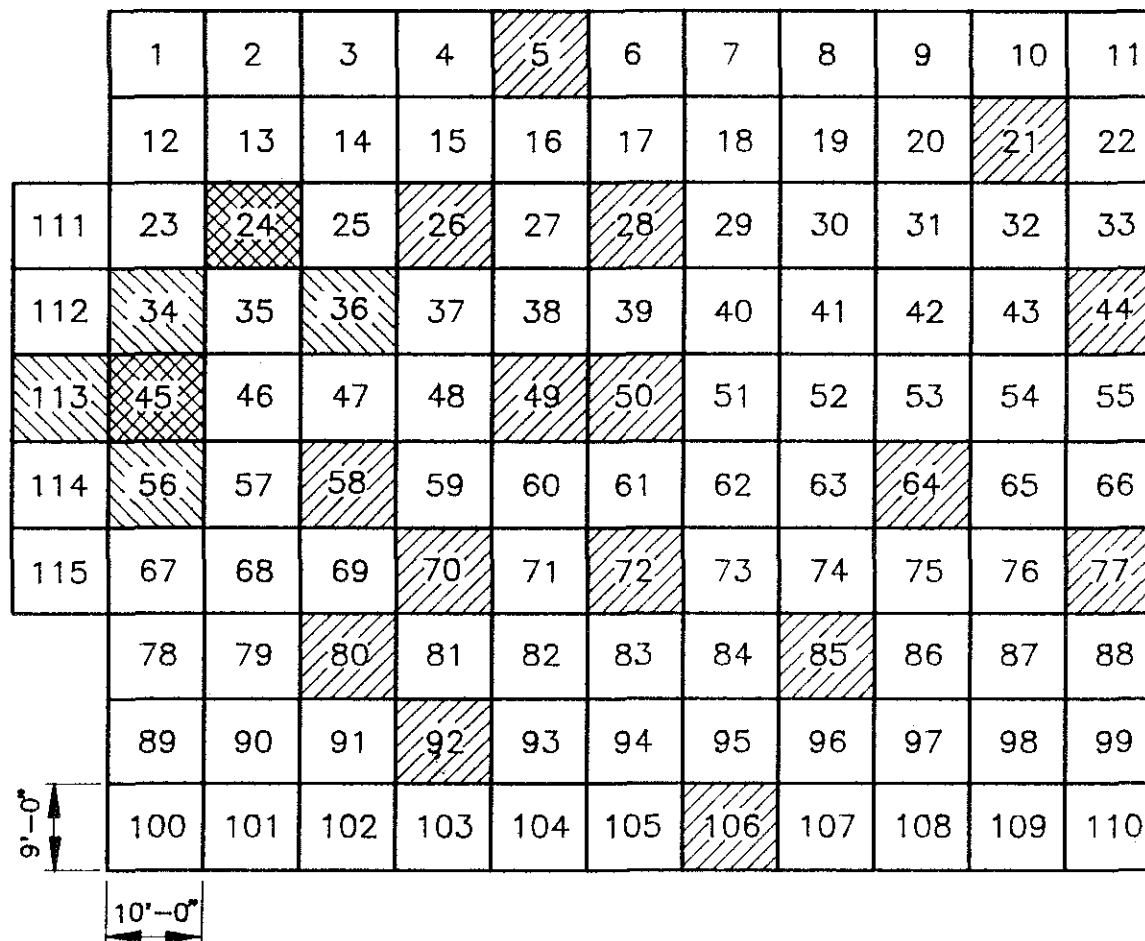


FIGURE 1

PPG INDUSTRIES, INC.  
 COATINGS & RESINS DIVISION,  
 CIRCLEVILLE, OHIO

SOIL SAMPLING GRID  
 INCINERATOR AREA

**ICF KAISER ENGINEERS**  
 PITTSBURGH, PA




DATE: 6/23/93

DR.: D.MAJERNIK

SCALE: 1"=20'

FILE NAME: FIG2-4

ND= NON DETECT  
 NA= NOT ANALYZED  
 ug/kg = MICROGRAMS/KILOGRAMS  
 ND/NA= 6"-12" INTERVAL/12"-24" INTERVAL

-  PREVIOUS (1989) SAMPLE LOCATION  
 PREVIOUS (1992) SAMPLE LOCATION  
 PREVIOUS/CURRENT SAMPLE LOCATION

JOB NO.: 0451200100

PLOT SCALE: 1=30

STARTED ON: 6/23/93

REVISED: 00/00/00

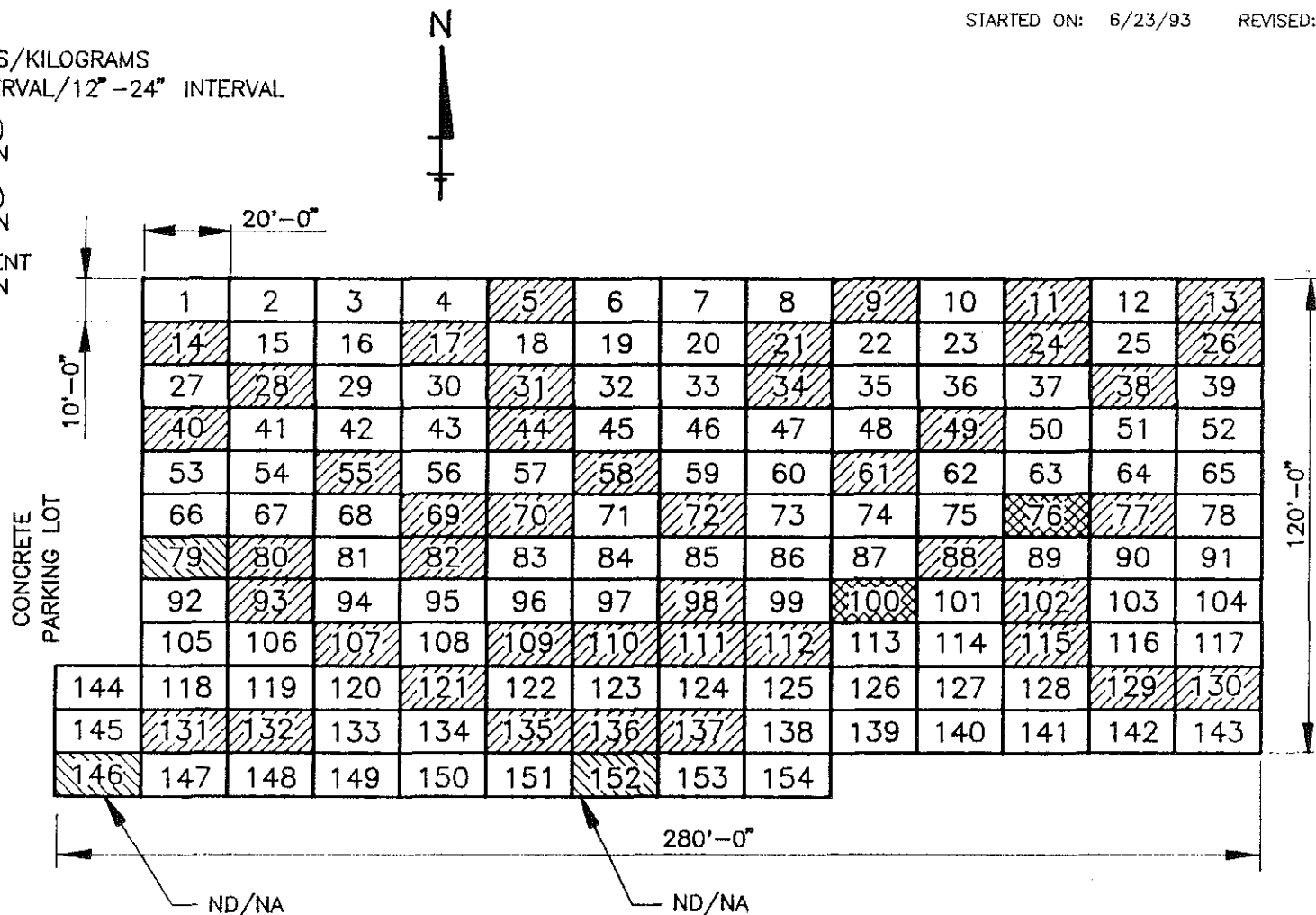


FIGURE 2

PPG INDUSTRIES, INC.  
 COATINGS & RESINS DIVISION,  
 CIRCLEVILLE, OHIO

**ICF KAISER ENGINEERS**  
 PITTSBURGH, PA

SOIL SAMPLING GRID  
 SOUTH PAD CLOSURE

DATE: 6/23/93

DR.: D.MAJERNIK

SCALE: 1"=40'

DWG. NO.: FIG2-5

**EXHIBIT 1**  
**TCLP RESULTS**



# ANALYTICAL REPORT

Report To: Mr. Robert Bear  
ICF Kaiser Engineers  
Four Gateway Center  
12th Floor  
Pittsburgh, PA 15222

Project: PPG CIRCLEVILLE TCLP

04/16/1993

NET Job Number: 93.00810

National Environmental Testing

NET Atlantic, Inc.  
Cambridge Division  
12 Oak Park  
Bedford, MA 01730

# NET Cambridge Division

## ANALYTICAL REPORT

**Report To:**

Mr. Robert Bear  
ICF Kaiser Engineers  
Four Gateway Center  
12th Floor  
Pittsburgh, PA 15222

**Reported By:**

National Environmental Testing  
NET Atlantic, Incorporated  
Cambridge Division  
12 Oak Park  
Bedford, MA 01730

Report Date: 04/16/1993

Collected By: ICF/C.Haefner

NET Job Number: 93.00810

Project: PPG CIRCLEVILLE TCLP

Shipped Via: Fedex

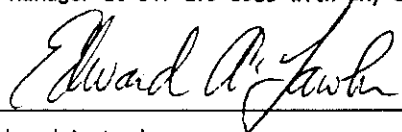
Client P.O. No: 04152-001-00

Job Description: PPG CIRCLEVILLE

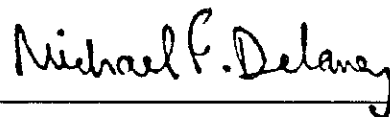
Airbill No:

NET Client No: 49655

This report has been approved and certified for release by the following staff. Please feel free to call the NET Project Manager at 617-275-3535 with any questions or comments.



Edward A. Lawler  
NET Project Manager



Michael F. Delaney, Ph.D.  
Laboratory Director

Analytical data for the following samples are included in this data report.

SAMPLE ID	NET ID	DATE TAKEN	TIME TAKEN	DATE REC'D	MATRIX
CV-93-0223-124 0-6"	79369	03/24/1993	09:20	03/25/1993	SOIL
CV-93-0227-145 0-6"	79370	03/24/1993	09:45	03/26/1993	SOIL
CV-93-0231-S100 0-6"	79371	03/24/1993	11:00	03/26/1993	SOIL
CV-93-0235-S76 0-6"	79372	03/24/1993	11:50	03/26/1993	SOIL

# NET Cambridge Division

## ANALYTICAL REPORT

Report Date: 04/16/1993

Report To: ICF Kaiser Engineers

NET Job No: 93.00810

Project: PPG CIRCLEVILLE TCLP

Date Rec'd: 03/25/1993

Sample ID	NET ID	Result	Units	Analysis Date	Analyst
-----					
TCLP Zero Headspace Extraction		SW-846, 1311			
CV-93-0223-124 0-6"	79369	04/02/1993	date	04/02/1993	jlh
CV-93-0227-145 0-6"	79370	04/02/1993	date	04/02/1993	jlh
CV-93-0231-S100 0-6"	79371	04/02/1993	date	04/02/1993	jlh
CV-93-0235-S76 0-6"	79372	04/02/1993	date	04/02/1993	jlh

# NET Cambridge Division

## ANALYTICAL REPORT

Report Date: 04/16/1993

Report To: ICF Kaiser Engineers

NET Job No: 93.00810

Project: PPG CIRCLEVILLE TCLP

Date Rec'd: 03/25/1993

Sample ID: CV-93-0223-124 0-6"

NET Sample No: 79369

Parameter	Result	Units	Analysis Date	Analyst
-----				
Volatiles by GC/MS-TCLP	S			
Ethylbenzene	<25	ug/L	04/06/1993	rnr
4-Methyl-2-pentanone	<25	ug/L		
Methylene Chloride	<25	ug/L		
Toluene	<25	ug/L		
m-Xylene	<25	ug/L		
o-Xylene	<25	ug/L		
p-Xylene	<25	ug/L		

# NET Cambridge Division

## ANALYTICAL REPORT

Report Date: 04/16/1993

Report To: ICF Kaiser Engineers

NET Job No: 93.00810

Project: PPG CIRCLEVILLE TCLP

Date Rec'd: 03/26/1993

Sample ID: CV-93-0227-145 0-6"

NET Sample No: 79370

Parameter	Result	Units	Analysis Date	Analyst
-----				
Volatiles by GC/MS-TCLP	S			
Ethylbenzene	<25	ug/L	04/06/1993	rnr
4-Methyl-2-pentanone	<25	ug/L		
Methylene Chloride	<25	ug/L		
Toluene	<25	ug/L		
m-Xylene	<25	ug/L		
o-Xylene	<25	ug/L		
p-Xylene	<25	ug/L		

# NET Cambridge Division

## ANALYTICAL REPORT

Report Date: 04/16/1993

Report To: ICF Kaiser Engineers

NET Job No: 93.00810

Project: PPG CIRCLEVILLE TCLP

Date Rec'd: 03/26/1993

Sample ID: CV-93-0231-S100 0-6"

NET Sample No: 79371

Parameter	Result	Units	Analysis Date	Analyst
-----				
Volatiles by GC/MS-TCLP	S			
Ethylbenzene	<25	ug/L	04/06/1993	rmr
4-Methyl-2-pentanone	<25	ug/L		
Methylene Chloride	<25	ug/L		
Toluene	<25	ug/L		
m-Xylene	<25	ug/L		
o-Xylene	<25	ug/L		
p-Xylene	<25	ug/L		

# NET Cambridge Division

## ANALYTICAL REPORT

Report Date: 04/16/1993

Port To: ICF Kaiser Engineers

NET Job No: 93.00810

Project: PPG CIRCLEVILLE TCLP

Date Rec'd: 03/26/1993

Sample ID: CV-93-0235-S76 0-6"

NET Sample No: 79372

Parameter	Result	Units	Analysis Date	Analyst
-----				
Volatiles by GC/MS-TCLP	S			
Ethylbenzene	<25	ug/L	04/06/1993	rnr
4-Methyl-2-pentanone	<25	ug/L		
Methylene Chloride	<25	ug/L		
Toluene	<25	ug/L		
m-Xylene	<25	ug/L		
o-Xylene	<25	ug/L		
p-Xylene	<25	ug/L		

PROJ. NO.		PROJECT NAME				NO. OF CON- TAINERS		REMARKS							
04572 PPG - Circleville								TCLP *							
SAMPLERS: (Signature) CEH/EHA Charles E Hoff															
STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION										
CU-93-0223-I2A	3/24	0920	X		I2A 0-6"	1	X								* TCLP PARAMETERS
CU-93-0227-I45	1	0945	X		I45 0-6"	1	X								XYLENE, ETHYL BENZENE
CU-93-0231-S100	1	1100	X		S100 0-6"	1	X								METHYL ISOBUTYL KETONE
CU-93-0235-S76	1	1150	X		S76 0-6"	1	X								METHANOL
															TOLUENE
															METHYLENE CHLORIDE
															ONLY THESE
															PARAMETERS ARE TO
															BE ANALYZED UNDER
															TCLP
Relinquished by: (Signature) Charles E Hoff			Date/Time 3/24/93 1240		Received by: (Signature)			Relinquished by: (Signature)			Date/Time		Received by: (Signature)		
Relinquished by: (Signature)			Date/Time		Received by: (Signature)			Relinquished by: (Signature)			Date/Time		Received by: (Signature)		
Relinquished by: (Signature)			Date/Time		Received for Laboratory by: (Signature) J. Frank			Date/Time 3/25/93 10:30		Remarks Ignore MIBK/moat per telecom 3/29-EH					

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files



**EXHIBIT 2**  
**SOIL SAMPLE ANALYSIS RESULTS**

## ANALYTICAL REPORT

Report To: Mr. Robert Bear  
ICF Kaiser Engineers  
Four Gateway Center  
12th Floor  
Pittsburgh, PA 15222

Project: PPG Circleville VOCs

04/12/1993

NET Job Number: 93.00809

National Environmental Testing

NET Atlantic, Inc.  
Cambridge Division  
12 Oak Park  
Bedford, MA 01730

# NET Cambridge Division

## ANALYTICAL REPORT

**Report To:**

Mr. Robert Bear  
ICF Kaiser Engineers  
Four Gateway Center  
12th Floor  
Pittsburgh, PA 15222

**Reported By:**

National Environmental Testing  
NET Atlantic, Incorporated  
Cambridge Division  
12 Oak Park  
Bedford, MA 01730

Report Date: 04/12/1993

Collected By: ICF/C.Haefner

NET Job Number: 93.00809

Project: PPG Circleville VOCs

Shipped Via: FEDEX

Client P.O. No: 04152-001-00

Job Description: PPG Circleville

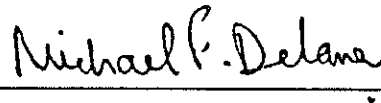
Airbill No:

NET Client No: 49655

This report has been approved and certified for release by the following staff. Please feel free to call the NET Project Manager at 617-275-3535 with any questions or comments.



Edward A. Lawler  
NET Project Manager



Michael F. Delaney, Ph.D.  
Laboratory Director

Analytical data for the following samples are included in this data report.

SAMPLE ID	NET ID	DATE TAKEN	TIME TAKEN	DATE REC'D	MATRIX
CV-93-0224-124 2-3'	79358	03/24/1993	09:30	03/25/1993	SOIL
CV-93-0225-124 3-4'	79359	03/24/1993	09:30	03/25/1993	SOIL
CV-93-0226-124 4-5'	79360	03/24/1993	09:30	03/25/1993	SOIL
CV-93-0228-145 2-3'	79361	03/24/1993	10:00	03/25/1993	SOIL
CV-93-0229-145 3-4'	79362	03/24/1993	10:10	03/25/1993	SOIL
CV-93-0230-145 4-5'	79363	03/24/1993	10:15	03/25/1993	SOIL
CV-93-0232-S100 2-3'	79364	03/24/1993	11:10	03/25/1993	SOIL
CV-93-0233-S100 3-4'	79365	03/24/1993	11:20	03/25/1993	SOIL
CV-93-0234-S100 4-5'	79366	03/24/1993	11:25	03/25/1993	SOIL
CV-93-0236-5901	79367	03/24/1993	12:00	03/25/1993	BLANK
CV-93-0237-5801	79368	03/24/1993	12:00	03/25/1993	BLANK

# NET Cambridge Division

## ANALYTICAL REPORT

Report Date: 04/12/1993

Report To: ICF Kaiser Engineers

NET Job No: 93.00809

Project: PPG Circleville VOCs

Date Rec'd: 03/25/1993

Sample ID: CV-93-0224-124 2-3'

NET Sample No: 79358

Parameter	Result	Units	Analysis Date	Analyst
TCL Volatiles by GC/MS 8240 S				
Methylene Chloride	<6.0	ug/Kg	04/07/1993	rmr

Sample ID: CV-93-0225-124 3-4'

NET Sample No: 79359

Parameter	Result	Units	Analysis Date	Analyst
TCL Volatiles by GC/MS 8240 S				
Methylene Chloride	<5.0	ug/Kg	04/01/1993	dhg

Sample ID: CV-93-0226-124 4-5'

NET Sample No: 79360

Parameter	Result	Units	Analysis Date	Analyst
TCL Volatiles by GC/MS 8240 S				
Methylene Chloride	<6.0	ug/Kg	04/07/1993	rmr

Sample ID: CV-93-0228-145 2-3'

NET Sample No: 79361

Parameter	Result	Units	Analysis Date	Analyst
TCL Volatiles by GC/MS 8240 S				
Methylene Chloride	<5.0	ug/Kg	04/02/1993	dhg

# NET Cambridge Division

## ANALYTICAL REPORT

Report Date: 04/12/1993

Report To: ICF Kaiser Engineers

NET Job No: 93.00809

Project: PPG Circleville VOCs

Date Rec'd: 03/25/1993

Sample ID: CV-93-0229-145 3-4'

NET Sample No: 79362

Parameter	Result	Units	Analysis Date	Analyst
TCL Volatiles by GC/MS 8240 S				
Methylene Chloride	<6.0	ug/Kg	04/02/1993	dhg

Sample ID: CV-93-0230-145 4-5'

NET Sample No: 79363

Parameter	Result	Units	Analysis Date	Analyst
TCL Volatiles by GC/MS 8240 S				
Methylene Chloride	<6.0	ug/Kg	04/07/1993	rmr

Sample ID: CV-93-0232-S100 2-3'

NET Sample No: 79364

Parameter	Result	Units	Analysis Date	Analyst
TCL Volatiles by GC/MS 8240 S				
Methylene Chloride	<6.0	ug/Kg	04/02/1993	dhg

Sample ID: CV-93-0233-S100 3-4'

NET Sample No: 79365

Parameter	Result	Units	Analysis Date	Analyst
TCL Volatiles by GC/MS 8240 S				
Methylene Chloride	<6.0	ug/Kg	04/02/1993	dhg

# NET Cambridge Division

## ANALYTICAL REPORT

Report Date: 04/12/1993

Report To: ICF Kaiser Engineers

NET Job No: 93.00809

Project: PPG Circleville VOCs

Date Rec'd: 03/25/1993

Sample ID: CV-93-0234-S100 4-5'

NET Sample No: 79366

Parameter	Result	Units	Analysis Date	Analyst
TCL Volatiles by GC/MS 8240 S				
Methylene Chloride	<5.0	ug/Kg	04/02/1993	dhg

Sample ID: CV-93-0236-5901

NET Sample No: 79367

Parameter	Result	Units	Analysis Date	Analyst
TCL Volatiles by GC/MS 624 AQ				
Methylene Chloride	<5.0	ug/L	03/31/1993	mfw

Sample ID: CV-93-0237-5801

NET Sample No: 79368

Parameter	Result	Units	Analysis Date	Analyst
TCL Volatiles by GC/MS 624 AQ				
Methylene Chloride	<5.0	ug/L	03/31/1993	mfw

# NET Cambridge Division

## QUALITY CONTROL DATA

Client: ICF Kaiser Engineers

NET Job No: 93.00809

Project: PPG Circleville VOCs

Report Date: 04/12/1993

### Surrogate Standard Percent Recovery

#### Abbreviated Surrogate Standard Names:

SS1	SS2	SS3	SS4	SS5	SS6	SS7	SS8	SS9	SS10	SS11	SS12
Bromofl	1,2-Dic	Toluene	Bromofl	1,2-Dic	Toluene						

Sample ID	NET ID	Matrix	Percent Recovery									SS10	SS11	SS12
			SS1	SS2	SS3	SS4	SS5	SS6	SS7	SS8	SS9			
CV-93-0224-124 2-	79358	SOIL				107	108	127						
CV-93-0225-124 3-	79359	SOIL				83	96	109						
CV-93-0226-124 4-	79360	SOIL				105	104	107						
CV-93-0228-145 2-	79361	SOIL				85	93	97						
CV-93-0229-145 3-	79362	SOIL				87	94	99						
CV-93-0230-145 4-	79363	SOIL				98	102	107						
CV-93-0232-S100 2	79364	SOIL				80	91	112						
CV-93-0233-S100 3	79365	SOIL				75	86	113						
CV-93-0234-S100 4	79366	SOIL				79	89	115						
CV-93-0236-5901	79367	BLANK	105	97	99									
CV-93-0237-5801	79368	BLANK	103	94	97									

#### Notes:

NR - This surrogate standard is Not Required. Other versions of this test method may use this surrogate standard.  
 Dil - This surrogate standard was diluted to below detectable levels due to concentrations of analytes in this sample.

#### Complete Surrogate Standard Names Listed by Analysis:

##### Pesticide Surrogate Standards:

Decachl = Decachlorobiphenyl	Dibutyl = Dibutylchloroendate	Tetrach = Tetrachloro-m-xylene
------------------------------	-------------------------------	--------------------------------

##### Volatile Surrogate Standards:

Bromofl = Bromofluorobenzene	1,2-Dichl = 1,2-Dichloroethane-d4	Toluene = Toluene-d8
------------------------------	-----------------------------------	----------------------

Drinking Water Method 524 1,2-Dichl = 1,2-Dichlorobenzene-d4

##### Semivolatile Surrogate Standards:

2-Fluor (1st) = 2-Fluorobiphenyl	Phenol- = Phenol-d6	2,4,6-T = 2,4,6-Tribromophenol
2-Fluor (2nd) = 2-Fluorophenol	Nitroben = Nitrobenzene-d5	p-Terph = p-Terphenyl

##### Herbicides Surrogate Standard:

2,4-Dic = 2,4-Dichlorophenyl acetic acid

##### Petroleum Hydrocarbon Fingerprint Surrogate Standard:

2-Fluor = 2-Fluorobiphenyl	para-Te = para-Terphenyl
----------------------------	--------------------------

# NET Cambridge Division

## QUALITY CONTROL DATA

Report To: ICF Kaiser Engineers

NET Job No: 93.00809

Project: PPG Circleville VOCs

Report Date : 04/12/1993

### Method Blank Analysis Data

Test Name	Result	Units	Run Batch	Run Date	Analyst Initials
-----					
TCL Volatiles by GC/MS 624 AQ					
Bromofluorobenzene	101	% recov.	1045	03/31/1993	mfw
1,2-Dichloroethane-d4	92	% recov.	1045	03/31/1993	mfw
Toluene-d8	98	% recov.	1045	03/31/1993	mfw
Methylene Chloride	<5.0	ug/L	1045	03/31/1993	mfw



# NET Cambridge Division

## QUALITY CONTROL DATA

Report To: ICF Kaiser Engineers

NET Job No: 93.00809

Project: PPG Circleville VOCs

Report Date : 04/12/1993

### Method Blank Analysis Data

Test Name	Result	Units	Run Batch	Run Date	Analyst Initials
-----					
TCL Volatiles by GC/MS 8240 S					
Bromofluorobenzene	92	% recov.	326	04/01/1993	dhg
1,2-Dichloroethane-d4	92	% recov.	326	04/01/1993	dhg
Toluene-d8	102	% recov.	326	04/01/1993	dhg
Methylene Chloride	<5.0	ug/Kg	326	04/01/1993	dhg

# NET Cambridge Division

## QUALITY CONTROL DATA

Report To: ICF Kaiser Engineers

NET Job No: 93.00809

Project: PPG Circleville VOCs

Report Date : 04/12/1993

### Method Blank Analysis Data

Test Name	Result	Units	Run Batch	Run Date	Analyst Initials
-----					
TCL Volatiles by GC/MS 8240 S					
Bromofluorobenzene	113	% recov.	327	04/07/1993	rnr
1,2-Dichloroethane-d4	105	% recov.	327	04/07/1993	rnr
Toluene-d8	103	% recov.	327	04/07/1993	rnr
Methylene Chloride	<5.0	ug/Kg	327	04/07/1993	rnr

# NET Cambridge Division

## QUALITY CONTROL DATA

Report To: ICF Kaiser Engineers

NET Job No: 93.00809

Project: PPG Circleville VOCs

Report Date: 04/12/1993

### Matrix Spike/Matrix Spike Duplicate Results

Compound	Spike Amount	Sample Result	Units	MS Result	MS % Recovery	MSD Result	MSD % Recovery	RPD
TCL Volatiles by GC/MS 8240 S								
Acetone	0.0	<7.0	ug/Kg					
Benzene	50.0	<7.0	ug/Kg	55.0	110.00	50.2	100.40	9.10
Bromodichloromethane	0.0	<7.0	ug/Kg					
Bromoform	0.0	<7.0	ug/Kg					
Bromomethane	0.0	<7.0	ug/Kg					
2-Butanone (MEK)	0.0	<7.0	ug/Kg					
Carbon Disulfide	0.0	<7.0	ug/Kg					
Carbon Tetrachloride	0.0	<7.0	ug/Kg					
Chlorobenzene	50.0	<7.0	ug/Kg	48.3	96.60	46.1	92.20	4.70
Chloroethane	0.0	<7.0	ug/Kg					
2-Chloroethylvinyl ether	0.0	<7.0	ug/Kg					
Chloroform	0.0	<7.0	ug/Kg					
Chloromethane	0.0	<7.0	ug/Kg					
Dibromochloromethane	0.0	<7.0	ug/Kg					
1,2-Dichlorobenzene	0.0	<7.0	ug/Kg					
1,3-Dichlorobenzene	0.0	<7.0	ug/Kg					
1,4-Dichlorobenzene	0.0	<7.0	ug/Kg					
1,1-Dichloroethane	0.0	<7.0	ug/Kg					
1,2-Dichloroethane	0.0	17	ug/Kg					
1,1-Dichloroethene	50.0	<7.0	ug/Kg	52.1	104.20	45.8	91.60	12.1
trans-1,2-Dichloroethene	0.0	<7.0	ug/Kg					
1,2-Dichloropropane	0.0	<7.0	ug/Kg					
cis-1,3-Dichloropropene	0.0	<7.0	ug/Kg					
trans-1,3-Dichloropropene	0.0	<7.0	ug/Kg					
Ethylbenzene	0.0	<7.0	ug/Kg					
2-Hexanone	0.0	<7.0	ug/Kg					
4-Methyl-2-pentanone (MIBK)	0.0	<7.0	ug/Kg					
Methylene Chloride	0.0	<7.0	ug/Kg					
Styrene	0.0	<7.0	ug/Kg					
1,1,2,2-Tetrachloroethane	0.0	<7.0	ug/Kg					
Tetrachloroethene	0.0	<7.0	ug/Kg					
Toluene	50.0	<7.0	ug/Kg	56.0	112.00	51.9	103.80	7.6
1,1,1-Trichloroethane	0.0	<7.0	ug/Kg					
1,1,2-Trichloroethane	0.0	<7.0	ug/Kg					
Trichloroethene	50.0	<7.0	ug/Kg	49.4	98.80	46.0	92.00	7.1
Trichlorofluoromethane	0.0	<7.0	ug/Kg					
Vinyl Acetate	0.0	<7.0	ug/Kg					
Vinyl Chloride	0.0	<7.0	ug/Kg					
m-Xylene	0.0	<7.0	ug/Kg					
o-Xylene	0.0	<7.0	ug/Kg					
p-Xylene	0.0	<7.0	ug/Kg					

NOTE: Data reported for spiked samples were analyzed in the same batch, but may not necessarily be that of your sample.

PRELIMINARY REPORT

93.00809

3294

## CHAIN OF CUSTODY RECORD

PROJ. NO.		PROJECT NAME				NO. OF CON- TAINERS	REMARKS						
SAMPLERS: (Signature)													
STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION								
CU-93-0224-12A	3/24	0930	X		I24 2'-3'	2	X						
CU-93-0225-12A		0930	X		I24 3'-4' (RUSH)	2	X						
CU-93-0226-12A		0930	X		I24 4'-5'	2	X		X				
CU-93-0228-12A		1000	X		I45 2'-3'	2	X						
CU-93-0229-145		1010	X		I45 3'-4' (RUSH)	2	X						
CU-93-0230-145		1015	X		I45 4'-5'	2	X		X				
CU-93-0232-5100		1110	X		S100 2'-3'	2	X						
CU-93-0233-5100		1120	X		S100 3'-4' (RUSH)	1	X						
CU-93-0234-5100		1125	X		S100 4'-5'	4	X		X				
CU-93-0236-5901		1200		X		2	X						
CU-93-0237-5901		1200		X		2	X						
Relinquished by: (Signature)						Date/Time		Received by: (Signature)		Date/Time		Received by: (Signature)	
Charles E. Hoff						3/24/93 1255							
Relinquished by: (Signature)						Date/Time		Received by: (Signature)		Date/Time		Received by: (Signature)	
Relinquished by: (Signature)						Date/Time		Received for Laboratory by: (Signature)		Date/Time		Remarks	
								E. Jacob		3/25/93 10:30		3 Samples for RUSH Per telecon w/Chuck Hoffner 3/26/93 - E	



State of Ohio Environmental Protection Agency

P.O. Box 1049, 1800 WaterMark Dr.  
Columbus, Ohio 43266-0149  
(614) 644-3020  
FAX (614) 644-2329

George V. Voinovich  
Governor

June 11, 1993

RE: Closure Plan  
PPG Industries, Inc.  
Circleville, Ohio

Mary Anne Edsall  
399 Kingston Pike  
Circleville, Ohio 43113

Ms. Edsall

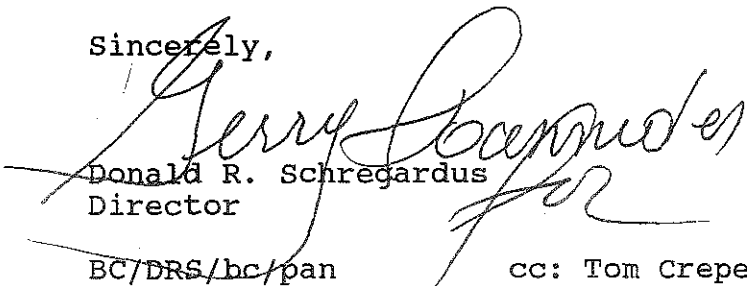
The Ohio Environmental Protection Agency (Ohio EPA) is hereby responding to your comments as given in the letter dated November 29, 1988. Your comments were in regard to the closure plan dated September 6, 1988 which was submitted by PPG Industries, Inc. (PPG). The closure plan identified the steps PPG was intending to perform to close four interim-status hazardous waste management units at its facility in Circleville, Ohio.

The actual responses to your comments are given in Attachment A.

Several important events have occurred since the closure plan was received. One of the first such events was the Ohio EPA's issuance of a proposed disapproval regarding the closure plan (issued via a letter dated January 24, 1989). This action prompted an equally important event, a request by PPG for an adjudication hearing. PPG's request initiated negotiations between the Ohio EPA and PPG. These negotiations have resulted in PPG doing numerous revisions to the closure plan.

I have been advised by my staff that the amended closure plan dated February 18, 1993 meets the closure-plan requirements of Ohio Administrative Code (OAC) rule 3745-66-12, and it would allow PPG to meet the closure performance standard of OAC rule 3745-66-11.

Sincerely,

  
Donald R. Schregardus  
Director

BC/DRS/bc/pan

cc: Tom Crepeau, DHWM, Central File  
Randy Meyer, DHWM, CO  
Chris Korleski, OAG  
Brad Campbell, DHWM, CDO



Attachment  
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## ATTACHMENT A - RESPONSES TO PUBLIC COMMENTS

Listed below are the Ohio EPA's responses to the comments given by Mary Anne Edsall in the letter dated November 29, 1988. Preceding each response is the comment that prompted it. Most of the comments have been reworded for brevity.

1. Comment No. 1: There was no "Facility Plot Plan-Hazardous Waste Management Units" included in the Closure plan for the public to review.

Response: The Ohio EPA is not sure why the library copy of the closure plan did not include the enclosure "Facility Plot Plan - Hazardous Waste Management Units." The Ohio EPA did not purposefully omit it from the closure plan.

2. Comment No. 2: The closure plan should be designed in a manner to eliminate post-closure escape of hazardous waste to the environment. There are basically no regulated standards for some of these chemicals.

Response PPG is responsible for establishing health-based standards based on guidelines of the U.S. Environmental Protection Agency. Ohio EPA believes that PPG has demonstrated in the closure plan that the effected soils left in-place pose no significant risk to human health. Health-based standards are located in Appendix E of the amended closure plan.

3. Comment No. 3: It is questionable whether incineration destroys all ignitable, etc., properties:

Response: In your comment you do not make any inferences as to how incineration performance relates to the closure of the hazardous waste management units. Therefore, responding to your comment is beyond the scope of this response.

4. Comment No. 4: There are no dates for when the closure must commence. There should be no delays.

Response: Unless a closure plan provides for an alternative closure period, a hazardous waste management unit is required by OAC rule 3745-66-12 to be closed within 180 days after its associated closure plan is approved. PPG has not been granted an extended closure period.

5. Comment No. 5: What was the source of the quench water?

Response: The Ohio EPA could not determine how your comment applies to the closure of the hazardous waste management units.

6. Comments Nos. 6,8,9,10: The water and residues should be tested for a full range of 129 priority pollutants and not just EP Toxicity and levels of regulated waste solvent. It is frightening to me, as a consumer, to think that I may be repurchasing some of this metal for a boiler system for my home. It would distress workers that were reprocessing contaminated metal. Will the water be discharged to Scippo Creek or the Scioto River?

Response: The hazardous wastes rules of the Ohio Administrative Code, which are the rules that require PPG to close the hazardous waste management units, only require PPG to evaluate the wastes generated during closure to determine whether they are hazardous wastes. The evaluation, more specifically, is required by OAC rule 3745-52-11. As described in the closure plan revision dated January 22, 1991, PPG has already disassembled the old "Liquid Waste Incinerator." The solvent and aqueous materials used to decontaminate the incinerator were all incinerated in PPG's on site permitted hazardous waste incinerator. The incinerator hearth, breeching, stack, refractory, ancillary equipment, foundation, containment pad, and organic and aqueous feed lines were transported to the Adams Center hazardous waste disposal facility in Fort Wayne, Indiana. Analytical results associated with the above wastes are contained in Attachment C of the January 22, 1991 closure plan.

7. Comment No. 11: The soil should also be tested for PCB's, and dioxins plus furan contamination if possible.

Response: As documented in the closure plan, the soil samples PPG collected in 1989 from the four hazardous waste management units were analyzed for the complete Hazardous Substance List volatile chemicals according to SW-846 Methods 8240, 5030 and 8015. In 1989 PPG also collected a limited number of composite soil samples from the hazardous waste management units,

except the Still Pad drum storage area. These composite soil samples were analyzed for PCBs according to SW-846 Methods 8080. The composite soil sample from the incinerator area was also analyzed for all dioxins and furans according to SW-846 Method 8280.

As required by an Administrative Order of Consent issued by the Ohio EPA against PPG in December 1989, PCB remediation has been occurring at the PPG facility. This remediation, among other things, has resulted in the removal of the storm sewer, manholes, and surface concrete of the Still Pad drum storage area. A report that describes the PCB remedial activities that have occurred can be found in the report by PPG titled East Yard Remediation, PPG Industries, February 1990, Project Number 88727.

8. Comment No. 12: Soil sampling should go deeper than first six inches of soil. The background samples are a joke.

Response: PPG is required to continue sampling at the hazardous waste management units until the horizontal and vertical extent of contamination is determined. This requirement has caused PPG to sample at depths deeper than six inches. Background concentrations were not accepted by the Ohio EPA as "clean" levels for the closing of the hazardous waste management units.

9. Comment No. 13: This should read "Methyl Ethyl Ketone from F005."

Response: The misspelling has been noted.

10. Comment No. 14: The testing scan is too narrow. Six inches is not deep enough for soil sampling. What does "managed by other appropriate methods approved by the EPA" mean?

Response: Regarding your comments on the "testing scan" and sampling depths, see responses (7) and (8). The only soil that has been managed during the closure of the hazardous waste management units was the soil that was incidentally removed when concrete was



removed. The concrete was transported to the Adams Center disposal facility in Fort Wayne, Indiana. Since PPG did not specify what was meant by "other appropriate methods approved by the Ohio EPA," the Ohio EPA cannot speculate on the meaning of that phrase.

11. Comment No. 15: I am not sure where management area #3 in attachment 6 is, due to the fact attachment 6 was never sent to the library.

Response: Your comment is addressed in response number (1) above.

12. Comment No. 16: Cost should not be considered for clean up.

Response: Estimating cost of closure is a requirement of OAC rule 3745-66-42.

13. Comment No. 17: Does the fact that this [financial] assessment cannot be used for any other purpose mean that its represents PPG's actual worth?

Response: On April 4, 1991 the Ohio EPA conducted a review of PPG's financial assurance and liability coverage as required by OAC rules 3745-66-43 and 3745-66-47. As noted in the letter dated June 18, 1991, PPG was found to be in compliance with these rules.

14. Comment No. 18: Please note there are almost no samples being conducted northeast of the incinerator.

Response: See response number 8 for a reply to your comment.

15. Comment No. 19: I strongly object to just disassemble everything and cart it away.

Response: See response number (6) for a description of how the old Liquid Waste Incinerator and its ancillary equipment were managed during closure. This material was subject to the waste evaluation requirements of OAC rules 3745-52-11 and 3745-59-07. Results of sampling on some of this material is included in the version of the closure plan dated January 22, 1991.



State of Ohio Environmental Protection Agency

P.O. Box 1049, 1800 WaterMark Dr.  
Columbus, Ohio 43266-0149  
(614) 644-3020  
FAX (614) 644-2329

George V. Voinovich  
Governor

June 11, 1993

RE: Closure Plan  
PPG Industries, Inc.  
Circleville, Ohio

Harriet S. Griffith  
7541 Stout Road  
Circleville, Ohio 43113

Ms. Griffith:

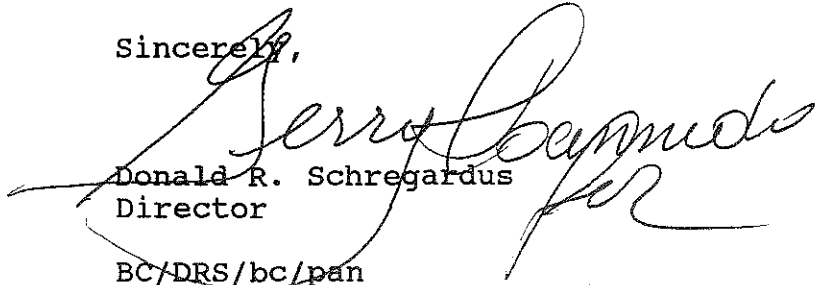
The Ohio Environmental Protection Agency (Ohio EPA) is hereby responding to your comments as given in the letter dated November 30, 1988. Your comments were in regard to the closure plan dated September 6, 1988 which was submitted by PPG Industries, Inc. (PPG). The closure plan identified the steps PPG was intending to perform to close four hazardous waste management units at its facility in Circleville, Ohio.

The actual responses to your comments are given in Attachment A.

Several important events have occurred since the closure plan was received. One of the first such events was the Ohio EPA's issuance of a proposed disapproval regarding the closure plan (issued via a letter dated January 24, 1989). This action prompted an equally important event, a request by PPG for an adjudication hearing. PPG's request initiated negotiations between the Ohio EPA and PPG. These negotiations have resulted in PPG doing numerous revisions to the closure plan, which includes the latest revision dated February 18, 1993.

I have been advised by my staff that the amended closure plan dated February 18, 1993 meets the closure-plan requirements of Ohio Administrative Code (OAC) rule 3745-66-12, and it would allow PPG to meet the closure performance standard of OAC rule 3745-66-11.

Sincerely,

  
Donald R. Schregardus  
Director

BC/DRS/bc/pan

cc: Tom Crepeau, DHWM, Central File  
Randy Meyer, DHWM, CO  
Chris Korleski, OAG  
Brad Campbell, DHWM, CDO

Attachment



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## ATTACHMENT A - RESPONSE TO PUBLIC COMMENTS

Listed below is the Ohio EPA's response to the comment given by Harriet Griffith in the letter dated November 30, 1988. Preceding the response is the comment that prompted it.

1. Comment: The Ohio EPA should request the USEPA for recommendations regarding possible dioxin and/or furan contamination of the soil in the area of the old liquid waste incinerator and surrounding property. Dismantling of the old incinerator, selling of scrap metal or burying it, stirring the soil around as per closure plan described by PPG, should not proceed until adequate testing for contamination is agreed upon.

Response: As documented in the closure plan, the soil samples PPG collected in 1989 from the four hazardous waste management units were analyzed for the complete Hazardous Substance List volatile chemicals according to SW-846 Methods 8240, 5030 and 8015. In 1989 PPG also collected a limited number of composite soil samples from the hazardous waste management units, except the Still Pad drum storage area. These composite soil samples were analyzed for PCBs according to SW-846 Methods 8080. The composite soil sample from the incinerator area was also analyzed for all dioxins and furans according to SW-846 Method 8280.

As required by an Administrative Order of Consent issued by the Ohio EPA against PPG in December 1989, PCB remediation has been occurring at the PPG facility. This remediation has resulted in the removal of the storm sewer, manholes, and surface concrete of the Still Pad drum storage area. A report that describes the PCB remedial activities that have occurred can be found in the report by PPG titled East Yard Remediation, PPG Industries, February 1990, Project Number 88727.



State of Ohio Environmental Protection Agency

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Columbus, Ohio 43266-0149  
(614) 644-3020  
FAX (614) 644-2329

George V. Voinovich

Governor

Donald R. Schregardus

Director

June 11, 1993

CERTIFIED MAIL

Larry LaDage  
Plant Manager  
PPG Industries, Inc.  
559 Pittsburgh Road  
P.O. Box 547  
Circleville, Ohio 43113

RE: Dismiss Case No. 89-HW-014  
PPG Industries, Inc.  
OHD 004 304 689/01-65-0641

Dear Mr. LaDage:

On January 24, 1989, Ohio EPA issued a proposed disapproval of PPG Industries, Inc.'s closure plan for a hazardous waste incinerator and three hazardous waste storage areas. PPG Industries, Inc. requested an adjudication hearing on February 21, 1989 (Case No. 89-HW-014). Since that time, the parties engaged in settlement discussions and PPG amended its closure plan. As a result of these discussions and revisions, the parties entered a settlement agreement on March 8, 1993. On May 5, 1993, the Hearing Examiner issued a Report and Recommendations in this matter. That report recommended that the proposed denial be withdrawn, and the plan be approved with modifications. The amended closure plan was approved in a letter dated June 11, 1993. I therefore dismiss Case No. 89-HW-014 and withdraw the proposed disapproval issued on January 24, 1989.

You are notified that this action of the Director is final and may be appealed to the Environmental Board of Review pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed with the Environmental Board of Review within thirty (30) days after notice of the Director's action. A copy of the appeal must be

I certify this to be a true and accurate copy of the  
official document as filed in the records of the Ohio  
Environmental Protection Agency.

By: Mary Cavin Date 6-11-93

OHIO E.P.A.

JUN 11 93

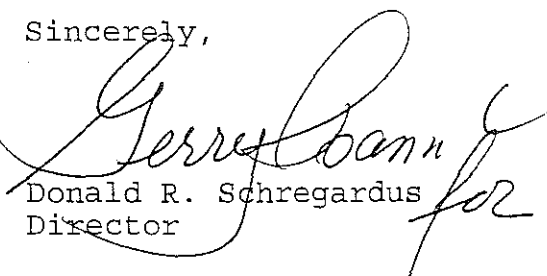
ENTERED DIRECTOR'S JOURNAL



Larry LaDage  
PPG Industries, Inc.  
Page Two

served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Board. An appeal may be filed with the Environmental Board of Review at the following address: Environmental Board of Review, 236 East Town Street, Room 300, Columbus, Ohio 43266-0557.

Sincerely,

  
Donald R. Schregardus  
Director

cc: Tom Crepeau, DHWM Central File, Ohio EPA  
Sandra Leibfritz, Ohio EPA, DHWM  
Brad Campbell, CDO, Ohio EPA  
Chris Korleski, AGO

OHIO E.P.A.

JUN 11 93

ENTERED DIRECTOR'S JOURNAL

I certify this to be a true and accurate copy of the official document as filed in the records of the Ohio Environmental Protection Agency.

By: Mary Cavin Date 6-11-93



State of Ohio Environmental Protection Agency

P.O. Box 1049, 1800 WaterMark Dr.  
Columbus, Ohio 43266-0149  
(614) 644-3020  
FAX (614) 644-2329

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JUN 17 1993

George V. Voinovich  
Governor

Donald R. Schregardus  
Director

OFFICE OF RCRA  
WASTE MANAGEMENT DIVISION  
EPA REGION V

AMENDED CLOSURE PLAN APPROVAL

CERTIFIED MAIL

June 11, 1993

RE: AMENDED CLOSURE PLAN  
PPG Industries, Inc.  
OHD 004 304 689

Larry LaDage  
Plant Manager  
PPG Industries, Inc.  
559 Pittsburgh Road  
P.O. Box 547  
Circleville, Ohio 43113

Dear Mr. LaDage:

On January 22, 1991, PPG Industries, Inc. submitted to Ohio EPA an amended closure plan for a hazardous waste incinerator (T03) and three hazardous waste storage areas (i.e., still pad, south storage pad, and west pad-S01) located at 559 Pittsburgh Road, Circleville, Ohio. Revisions to the amended closure plan were received on December 11, 1992 and February 19, 1993. The amended closure plan was submitted pursuant to Rule 3745-66-12 of the Ohio Administrative Code (OAC) in order to demonstrate that PPG Industries, Inc.'s proposal for closure complies with the requirements of OAC Rules 3745-66-11 and 3745-66-12.

The public was given the opportunity to submit written comments regarding the closure plan of PPG Industries, Inc. in accordance with OAC Rule 3745-66-12. Public comments were received and considered by Ohio EPA.

Based upon review of PPG Industries, Inc.'s submittal and subsequent revisions, I conclude that the amended closure plan for the hazardous waste facility at 559 Pittsburgh Road, as modified herein, meets the performance standard contained in OAC Rule 3745-66-11 and complies with the pertinent parts of OAC Rule 3745-66-12.

The amended closure plan submitted to Ohio EPA on January 22, 1991 and revised on December 11, 1992 and February 19, 1993 by PPG Industries, Inc. is hereby approved with the following modifications:

I certify this to be a true and accurate copy of the  
official document as filed in the records of the Ohio  
Environmental Protection Agency.

By: Mary Cavin Date 6-11-93

OHIO E.P.A.

JUN 11 93

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1. Upon completion of soil sampling for total constituent analysis and toxicity characteristic leaching procedure (TCLP), PPG shall modify the amended closure plan (pursuant to OAC Rule 3745-66-12) if the sampling results indicate concentrations of hazardous constituents above the health-based clean standard or if TCLP results indicate detectable concentrations of hazardous constituents in the leachate above the lowest method detection limit.
2. PPG shall resubmit Attachment E of the amended closure plan with the following revisions:
  - (a) PPG stated that the converted reference concentration (RfC) for methylene chloride of 0.86 mg/kg-d would be used in the inhalation pathways in the risk assessment. Also, the inhalation slope factor for methylene chloride is  $1.7E-3 \text{ (mg/kg-d)}^{-1}$  as listed on Table 3-1. The risk-based calculations in the baseline risk assessment were not corrected. PPG shall correct all risk-based calculations in Tables 5-8 through 5-55 which are associated with the inhalation pathways.
  - (b) PPG stated that the concentration of methanol on Table 2-2 would be corrected from 0.968 to 0.988 mg/kg and that the risk-based calculations would be rechecked and corrected. The risk-based calculations in the baseline risk assessment were not corrected. PPG shall correct all the risk-based calculations in Tables 5-8 through 5-55 which are associated with 0.988 mg/kg of methanol.
  - (c) PPG agreed to determine the potential of residual soil contaminants to leach into the ground water by conducting TCLP. The ground water concentration was determined by applying fate and transport modelling to the leachate concentration. This is not acceptable as pointed out by USEPA in March 19, 1987 "Federal Register" (pp. 8704-8709). PPG shall delete Section 4, 4.10, and associated tables.
  - (d) When the soil concentration for methanol and methyl isobutyl ketone are properly corrected, the concentration in the atmosphere in the vapor phase and particulate matter will change. PPG shall recalculate the air concentration and correct the associated risk-based calculations in Tables 5-8 through 5-55.

I certify this to be a true and accurate copy of the official document as filed in the records of the Ohio Environmental Protection Agency.

By: Mary Carvin Date 6-11-93

OHIO E.P.A.  
JUN 11 93  
ENTERED DIRECTOR'S JOURNAL

3. Upon completion of the revisions in the baseline risk assessment, PPG shall correct the summary tables in Section 4.0.
4. Within fourteen (14) days of receipt of this approval letter, PPG shall submit responses to Modification Nos. 2 and 3 to the Ohio EPA, Central District Office and Central Office. Where necessary, the district inspector may require changes to the responses to ensure compliance with OAC Rules 3745-66-11 and 3745-66-12. Delays in reaching final agreement on the responses cannot be used to delay closure without an extension of time being granted pursuant to OAC Rule 3745-66-13. The closure period, as described in the closure schedule, begins the day this letter is received.

Please be advised that approval of this amended closure plan does not release PPG Industries, Inc. from any responsibilities as required under the Hazardous and Solid Waste Amendments of 1984 regarding corrective action for all releases of hazardous waste or constituents from any solid waste management unit, regardless of the time at which waste was placed in the unit.

Notwithstanding compliance with the terms of the closure plan, the Director may, on the basis of any information that there is or has been a release of hazardous waste, hazardous constituents, or hazardous substances into the environment, issue an order pursuant to Section 3734.20 et seq. of the Revised Code or Chapters 3734 or 6111 of the Revised Code requiring corrective action or such other response as deemed necessary; or initiate appropriate action; or seek any appropriate legal or equitable remedies to abate pollution or contamination or to protect public health or safety or the environment.

Nothing here shall waive the right of the Director to take action beyond the terms of the closure plan pursuant to the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C, §9601 et seq., as amended by the Superfund Amendments and Reauthorization Act of 1986, Pub. L. 99-499 ("CERCLA") or to take any other action pursuant to applicable Federal or State law, including but not limited to the right to issue a permit with terms and conditions requiring corrective action pursuant to Chapters 3734 or 6111 of the Revised Code; the right to seek injunctive relief, monetary penalties and punitive

I certify this to be a true and accurate copy of the official document as filed in the records of the Ohio Environmental Protection Agency.

By: Mary Carvin Date 6-11-93

OHIO E.P.A.

JUN 11 93

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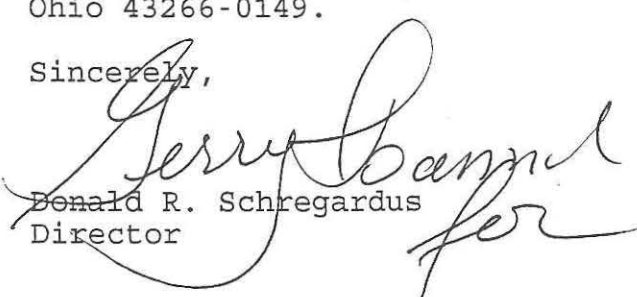
Mr. Larry LaDage  
PPG Industries, Inc.  
Page Four

damages, to undertake any removal, remedial, and/or response action relating to the facility, and to seek recovery for any costs incurred by the Director in undertaking such actions.

You are notified that this action of the Director is final and may be appealed to the Environmental Board of Review pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed with the Environmental Board of Review within thirty (30) days after notice of the Director's action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Board. An appeal may be filed with the Environmental Board of Review at the following address: Environmental Board of Review, 236 East Town Street, Room 300, Columbus, Ohio 43266-0557.

When closure is completed, the Ohio Administrative Code Rule 3745-66-15 requires the owner or operator of a facility to submit to the Director of the Ohio EPA certification by the owner or operator and an independent, registered professional engineer that the facility has been closed in accordance with the approved closure plan. The certification by the owner or operator shall include the statement found in OAC 3745-50-42(D). These certifications should be submitted to: Ohio Environmental Protection Agency, Division of Hazardous Waste Management, Attn: Thomas Crepeau, Data Management Section, P.O. Box 1049, Columbus, Ohio 43266-0149.

Sincerely,

  
Donald R. Schregardus  
Director

DRS/SL/pas

cc: Tom Crepeau, DHWM Central File, Ohio EPA  
Randy Meyer, Ohio EPA, DHWM  
Section Chief, Ohio Permit Section  
USEPA - Region V  
Lundy Adelsberger, CDO, Ohio EPA  
Brad Campbell, CDO, Ohio EPA

I certify this to be a true and accurate copy of the official document as filed in the records of the Ohio Environmental Protection Agency.

By: Mary Cavin Date 6-11-93

OHIO E.P.A.

JUN 11 93

ENTERED DIRECTOR'S JOURNAL





PPG Industries, Inc.  
One PPG Place Pittsburgh, Pennsylvania 15272 USA

Joseph M. Karas  
Assistant Counsel  
Law Department  
Direct Dial: (412) 434-2415  
Telecopy: (412) 434-4291

March 31, 2008

**VIA CERTIFIED MAIL**

Ms. Margaret M. Guerriero, Director  
Land & Chemicals Division  
Superfund Division  
U.S. Environmental Protection Agency  
Region 5  
77 West Jackson Boulevard, L-8J  
Chicago, Illinois 60604

Dear Ms. Guerriero:

Enclosed are documents evidencing PPG's demonstration of financial responsibility under the Consent Decree for the New Lyme Superfund Site. Included in the documents are: (1) a letter from William H. Hernandez, PPG's Chief Financial Officer; (2) a letter from PPG's independent accounting firm, Deloitte & Touche LLP; and (3) a copy of PPG's 2007 Annual Report to shareholders (which includes PPG's 2007 Form 10-K).

We recognize that the regulatory language of 40 CFR Parts 264 and 265 require owners or operators to use specific wording in letters submitted to the Regional Administrator in support of the use of the financial test for closure/post-closure care of facilities regulated under the Resource Conservation and Recovery Act (RCRA). However, certain provisions of the required language are not applicable to the present circumstances. Consequently, although PPG has endeavored to assure that the wording of Mr. Hernandez's letter is in accordance with applicable requirements, the letter has been modified as appropriate.

It is my understanding that this submittal for the current year will satisfy the financial responsibility obligations of PPG for the New Lyme site. Please contact me if this is not your understanding or if you have any comments or questions.

Very truly yours,

Joseph M. Karas  
Assistant Counsel

Enclosures

cc: K. Leckey  
T. Ebbert  
K. Horvat (Deloitte & Touche LLP)  
P. King  
J. Stengel (Deloitte & Touche LLP)

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**PPG Industries, Inc.**

One PPG Place Pittsburgh, Pennsylvania 15272 USA Telephone: (412) 434-2102 Fax: (412) 434-2134

**William H. Hernandez**

Senior Vice President, Finance and CFO

March 28, 2008

**VIA CERTIFIED MAIL**

Ms. Margaret M. Guerriero, Director  
Land & Chemicals Division  
Superfund Division  
U.S. Environmental Protection Agency  
Region 5  
77 West Jackson Boulevard, L-8J  
Chicago, Illinois 60604

Dear Ms. Guerriero:

I am the Chief Financial Officer of PPG Industries, Inc., One PPG Place, Pittsburgh, Pennsylvania 15272. This letter is in support of the use of the financial test to demonstrate financial responsibility for closure and/or post-closure care as specified in Subpart H of 40 CFR Parts 264 and 265.

The owner or operator identified above is a Settling Defendant at the New Lyme Superfund Site, located in Ashtabula County, Ohio. In accordance with Article XIII.41 of the New Lyme Consent Decree, this owner or operator is hereby demonstrating financial security in satisfaction of said Article through the financial test specified in Subpart H of 40 CFR Parts 264 and 265.

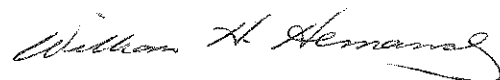
This owner or operator is required to file a Form 10-K with the Securities and Exchange Commission (SEC) for the latest fiscal year.

The fiscal year of this owner or operator ends on December 31. The figures for the following items marked with an asterisk are derived from the owner or operator's independently audited, year-end financial statements for the latest completed fiscal year ended December 31, 2007.

		(in Millions of Dollars)
<b><u>Alternative I:</u></b>		
1.	Sum of current closure and post-closure cost estimates and cost estimates for work required under four (4) Superfund Consent Decrees, including \$42,600 under the above-referenced Consent Decree for the New Lyme Superfund Site, located in Ashtabula County, Ohio:	22.1
*2.	Total liabilities (if any portion of the closure or post-closure cost estimates or the cost estimates for the work required under this Consent Decree is included in the total liabilities, you may deduct the amount of that portion from this line and add that amount to lines 3 and 4):	8,345

<u>Alternative I:</u>		<u>(in Millions of Dollars)</u>	
*3.	Tangible net worth:	<u>2,063</u>	
*4.	Net worth:	<u>4,151</u>	
*5.	Current assets:	<u>7,136</u>	
*6.	Current liabilities:	<u>4,661</u>	
7.	Net working capital [line 5 minus line 6]:	<u>2,475</u>	
*8.	The sum of net income plus depreciation, depletion, and amortization:	<u>1,214</u>	
9.	Total assets in U.S. (required only if less than 90% of the firm's assets are located in the U.S.):	<u>7,711</u>	
		<u>Yes</u>	<u>No</u>
10.	Is line 3 at least \$10 million?	<u>X</u>	<u>          </u>
11.	Is line 3 at least six times line 1?	<u>X</u>	<u>          </u>
12.	Is line 7 at least six times line 1?	<u>X</u>	<u>          </u>
13.	Are at least 90% of firm's assets located in the U.S.? If not, complete line 14.	<u>          </u>	<u>X</u>
14.	Is line 9 at least six times line 1?	<u>X</u>	<u>          </u>
15.	Is line 2 divided by line 4 less than 2.0?	<u>          </u>	<u>X</u>
16.	Is line 8 divided by line 2 greater than 0.1?	<u>X</u>	<u>          </u>
17.	Is line 5 divided by line 6 greater than 1.5?	<u>X</u>	<u>          </u>

Sincerely,



William H. Hernandez  
 Senior Vice President,  
 Finance and CFO  
 March 28, 2008

## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM ON APPLYING AGREED-UPON PROCEDURES

To the Board of Directors of  
PPG Industries, Inc.:

We have performed the procedures included in the Code of Federal Regulations Title 40, Part 264, Section 143 (40 CFR 264.143), which were agreed to by the United States Environmental Protection Agency, Region 5, and PPG Industries, Inc., solely to assist the specified parties in evaluating management's assertion about PPG Industries, Inc.'s compliance with the financial test option as of December 31, 2007, included in the accompanying letter dated March 28, 2008 from Mr. William H. Hernandez of PPG Industries, Inc. Management is responsible for PPG Industries, Inc.'s compliance with those requirements. This agreed-upon procedures engagement was performed in accordance with standards established by the American Institute of Certified Public Accountants, as adopted by the Public Company Accounting Oversight Board (PCAOB). The sufficiency of these procedures is solely the responsibility of the parties specified in this report. Consequently, we make no representation regarding the sufficiency of the procedures described below either for the purpose for which this report has been requested or for any other purpose.

The procedures that we performed and related findings are as follows:

1. We compared the amounts included in items 2, 4, 5, and 6 under the caption Alternative I in the letter referred to above with the corresponding amounts in the consolidated audited financial statements of PPG Industries, Inc. as of and for the year ended December 31, 2007, on which we have issued our report dated February 21, 2008, which expresses an unqualified opinion and includes an explanatory paragraph relating to the Company's adoption as of January 1, 2007, of FASB Interpretation No. 48, "Accounting for Uncertainty in Income Taxes, an interpretation of FASB Statement No. 109" and as of December 31, 2006, of Statement of Financial Accounting Standards No. 158, "Employers' Accounting for Defined Benefit Pension and Other Postretirement Plans, an amendment of FASB Statements No. 87, 88, 106, and 132(R)", and noted that such amounts were in agreement.
2. We recomputed from, or reconciled to, the consolidated financial statements referred to in procedure 1, the information included in items 3, 7, and 8 under the caption Alternative I in the letter referred to above and noted no differences.

We were not engaged to, and did not, perform an examination, the objective of which would be the expression of an opinion on the accompanying letter dated March 28, 2008. Accordingly, we do not express such an opinion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you.

This report is intended solely for the information and use of the board of directors and management of PPG Industries, Inc. and the United States Environmental Protection Agency, Region 5, and is not intended to be and should not be used by anyone other than these specified parties.

*Deloitte & Touche LLP*

March 28, 2008



**PPG Industries, Inc.**

One PPG Place Pittsburgh, Pennsylvania 15272 USA Telephone: (412) 434-2102 Fax: (412) 434-2134

**William H. Hernandez**  
Senior Vice President, Finance and CFO

March 20, 2007

**VIA CERTIFIED MAIL**

Mr. Chris Korleski, Director  
Ohio Environmental Protection Agency  
Division of Hazardous Waste Management  
Lazarus Government Center  
50 West Town Street  
Suite 700  
P.O. Box 1049  
Columbus, OH 43216-1049

Dear Mr. Korleski:

I am the Chief Financial Officer of PPG Industries, Inc., One PPG Place, Pittsburgh, Pennsylvania 15272. This letter is in support of the use of the financial test to demonstrate financial responsibility for liability coverage and closure and/or post-closure care as specified in rules 3745-55-40 to 3745-55-51 and 3745-66-40 to 3745-66-48 of the Administrative Code.

The firm identified above is the owner or operator of the following facilities for which liability coverage for both sudden and non-sudden accidental occurrences is being demonstrated through the financial test specified in rules 3745-55-40 to 3745-55-51 and 3745-66-40 to 3745-66-48 of the Administrative Code:

<u>EPA ID Number</u>	<u>Ohio Permit</u>	<u>Address</u>
OHD004198917	02-77-0453	Barberton, OH
OHD004304689	01-65-0641	Circleville, OH

The firm identified above guarantees, through the guarantee specified in rules 3745-55-40 through 3745-55-51 and 3745-66-40 through 3745-66-48 of the Administrative Code, liability coverage for both sudden and nonsudden accidental occurrences at the following facilities owned or operated by the following: None.

1. The firm identified above owns or operates the following facilities for which financial assurance for closure or post-closure care or liability coverage is demonstrated through the financial test specified in rules 3745-55-40 to 3745-55-51 and 3745-66-40 to 3745-66-48 of the Administrative Code and is assured through a financial test. The current closure and/or post-closure cost estimate covered by the test are shown for each facility:

<u>EPA ID Number</u>	<u>Ohio Permit</u>	<u>Address</u>	<u>Closure Costs</u>	<u>Post-Closure Costs</u>
OHD004198917	02-77-0453	Barberton, OH	\$ 387,000	-0-
OHD004304689	01-65-0641	Circleville, OH	<u>\$4,604,069</u>	<u>-0-</u>
<b>TOTAL</b>			\$4,991,069	-0-

2. The firm identified above guarantees, through the guarantee specified in rules 3745-55-40 to 3745-55-51 and 3745-66-40 to 3745-66-48 of the Administrative Code, the closure and post-closure care or liability coverage of the following facilities owned or operated by the guaranteed party. The current cost estimates for the closure or post-closure care so guaranteed are shown for each facility: None.

3. The firm identified above is demonstrating financial assurance for the closure or post-closure care of the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in rules 3745-55-40 to 3745-55-51 and 3745-66-40 to 3745-66-48 of the Administrative Code. The current closure and/or post-closure cost estimates covered by such a test are shown for each facility:

<u>EPA ID Number</u>	<u>Address</u>	<u>Closure Costs</u>	<u>Post-Closure Costs</u>
LAD008086506	Lake Charles, LA	\$2,897,841	\$7,741,458
WVD004336343	Natrium, WV	<u>\$ 454,822</u>	<u>-0-</u>
<b>TOTAL</b>		\$3,352,663	\$7,741,458

<u>Other</u>	<u>Address</u>	<u>DCR Plan/Corrective Action (N.J.C.A. 7:1E)</u>
NJD002329647	Gloucester City, NJ	\$2,000,000

<u>Superfund Site</u>	<u>Address</u>	<u>Closure Costs</u>	<u>Post-Closure Costs</u>
Bowers Landfill	Pickaway County, OH	-0-	\$2,000,000
Hranica Landfill	Butler County, PA	\$1,500,000	-0-
New Lyme Landfill	Ashtabula County, OH	\$ 42,600	-0-
Pulverizing Services Site	Moorestown, NJ	<u>\$2,500,000</u>	<u>-0-</u>
<b>TOTAL</b>		\$4,042,600	\$2,000,000

4. The firm identified above owns or operates the following hazardous waste management facilities for which financial assurance for closure or, if a disposal facility, post-closure care, is not demonstrated to the director through the financial test or any other financial assurance mechanisms specified in rules 3745-55-40 to 3745-55-51 and 3745-66-40 to 3745-66-48 of the



Administrative Code. The current closure and/or post-closure cost estimates not covered by such financial assurance are shown for each facility: None.

5. This firm is the owner or operator of the following UIC facilities for which financial assurance for plugging and abandonment is required under Chapter 3745-34 of the Administrative Code and is assured through a financial test. The current closure cost estimates as required by Chapters 3745-34, 3745-55 and 3745-66 of the Administrative Code are shown for each facility: None.

This firm is required to file a Form 10-K with the Securities and Exchange Commission (SEC) for the latest fiscal year.

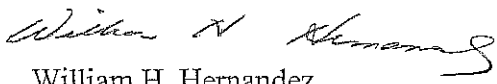
The fiscal year of this firm ends on December 31. The figures for the following items marked with an asterisk are derived from this firm's independently audited, year-end financial statements for the latest completed fiscal year, ended December 31, 2006.

<u>Alternative I:</u>	<u>(in Millions of Dollars)</u>
1. Sum of current and post-closure cost estimates (total of all cost estimates listed above):	24.1
2. Amount of annual aggregate liability coverage to be demonstrated:	15.0
3. Sum of lines 1 and 2:	39.1
*4. Total liabilities (if any portion of your closure or post-closure cost estimates is included in your total liabilities, you may deduct that portion from this line and add that amount to lines 5 and 6):	6,639
*5. Tangible net worth:	1,252
*6. Net worth:	3,234
*7. Current assets:	4,592
*8. Current liabilities:	2,787
9. Net working capital (line 7 minus line 8):	1,805

<u>Alternative I:</u>	<u>(in Millions of Dollars)</u>	
*10. The sum of net income plus depreciation, depletion, and amortization:	<u>1,091</u>	
11. Total assets in U.S. (required only if less than 90% of assets are located in the U.S.):	<u>5,850</u>	
	<u>Yes</u>	<u>No</u>
12. Is line 5 at least \$10 million?	<u>X</u>	<u></u>
13. Is line 5 at least six times line 3?	<u>X</u>	<u></u>
14. Is line 9 at least six times line 3?	<u>X</u>	<u></u>
15. Are at least 90% of assets located in the U.S.? If not, complete line 16.	<u></u>	<u>X</u>
16. Is line 11 at least six times line 3?	<u>X</u>	<u></u>
17. Is line 4 divided by line 6 less than 2.0?	<u></u>	<u>X</u>
18. Is line 10 divided by line 4 greater than 0.1?	<u>X</u>	<u></u>
19. Is line 7 divided by line 8 greater than 1.5?	<u>X</u>	<u></u>

I hereby certify that the wording of this letter is identical to the wording specified in paragraph (G) of rule 3745-55-51 of the Administrative Code as such regulations were constituted on the date shown immediately below.

Sincerely,

  
 William H. Hernandez  
 Senior Vice President, Finance and CFO

March 20, 2007



PPG Industries, Inc.  
One PPG Place Pittsburgh, Pennsylvania 15272 USA

Joseph M. Karas  
Assistant Counsel  
Law Department  
Direct Dial: (412) 434-2415  
Telecopy: (412) 434-4291

March 21, 2007

**VIA CERTIFIED MAIL**

Mr. Chris Korleski, Director  
Ohio Environmental Protection Agency  
Division of Hazardous Waste Management  
Lazarus Government Center  
50 West Town Street, Suite 700  
P.O. Box 1049  
Columbus, OH 43216-1049

Dear Mr. Korleski:

Enclosed are the following documents evidencing PPG's demonstration of financial responsibility under the Resource Conservation and Recovery Act: (1) letter from PPG's Chief Financial Officer, William H. Hernandez; (2) letter from PPG's independent accounting firm, Deloitte & Touche LLP; and (3) PPG's 2006 Annual Report to shareholders (which includes PPG's 2006 Form 10-K).

PPG has endeavored to assure that the wording of Mr. Hernandez's letter is in accordance with all applicable requirements. Please note that the total sum of aggregate sudden and non-sudden liability demonstrated is \$15 million. This is the amount of liability coverage required by the State of Louisiana. For the sake of consistency, this amount is used in all of PPG's financial responsibility demonstration letters.

In accordance with our past discussions with your office, PPG is not required to submit guarantees for closure, post closure and liability for the Circleville facility because PPG Industries, Inc. and PPG Industries Ohio, Inc. are co-operators of the Circleville facility.

Please address all questions on this submission to the undersigned.

Very truly yours,

Joseph M. Karas  
Assistant Counsel

Enclosures

cc: K. Leckey	F. Ortiz
D. Mazzocco	I. Raiber
K. Horvat (Deloitte & Touches LLP)	M. LaGreca
J. Stengel (Deloitte & Touche LLP)	D. Neal
I. Wilder (Ohio EPA)	

## **PPG's Proposed Settlement Comments**

### **1. Section III, Annual Certification**

We discussed on the certification matter and felt we could eliminate the certification requirements if PPG is willing to give up fight on other issues.

### **2. P&IDs under IV.C.1.c**

This is not a big issue whether or not it is included in the permit. As part of information required, as we described in our response to PPG's appeal, ultimately such information would be required for a permit modification request.

### **3. Condition IV.C.1, Overflow Tank**

This tank is included in the table (Page 20 of 24 of the permit). During PPG's visit to our office, we discussed this tank why it was included as a hazardous waste storage tank. If it is not a hazardous waste storage tank, it would become part of the closed-vent system, because all vents from the tank farm are connected to this tank which is under pressure. This would expand the closed-vent system by including the pressurized closed-vent system. Under this scenario, PPG must conduct leak detection on a pressurized system, in addition to the closed-vent system specified in the permit. PPG said they will study the issue, but never responded.

### **4. Condition IV.C.2.b, Pressure and Temperature Monitoring**

No problem with the proposed addition ("connected to ERU that is").

### **5. Condition IV.C.3.b(2), TOU Specifications**

TOU specifications and operating conditions are necessary in order to assure that the 95 % efficiency can be achieved. We discussed this condition during our meeting with PPG and offer to delete this condition, if Title 5 air permit covers the similar conditions. To date, we have not received any information from PPG.

In fact, the current permit conditions provide no evidence of meeting the 95 % destruction efficiency, because PPG never submitted the original design conditions and manufacturer's shop drawings indication the destruction efficiency.

### **6. Condition IV.C.4, Nitrogen Blanketing System for the Tank Farm**

I could accept the revised language.

PPG Ohio, Inc.  
Circleville, OH  
OHD 004 304 689

1. Condition IV.c.2.b:

Pressure and Temperature monitoring for resin tank: We could eliminate the pressure and temperature monitoring for the resin tanks. However, we may want to add the oxygen monitoring for the vapor stream to the TOU to make sure that the oxygen concentration would be maintained at a set point for safety.

2. Condition IV.C.3.b(2)

Operational parameters for TOU: If PPG certifies that the TOU complies with particular conditions under the air regulations (40 CFR part 60, 61 or 63) in accordance with 40 CFR § 264.1080(b)(7), the TOU operating conditions could be eliminated. These conditions under the air regulation must be specific to the TOU, including any documentation that the TOU efficiency exceeds the RCRA standards.

3. Condition IV.C.4.a-c

Nitrogen blanketing: If nitrogen blanketing is an essential and normal operation of the tank system, reporting and maintaining malfunction should be part of the operating record. Therefore, it is the obligation of PPG to keep such records, since it has great impacts to the safety and release of organics to the environment.

4. Condition IV.C.1.c

P&ID Diagrams: How could recitation of regulatory requirements create confusion and redundancy? In fact, it could avoid future confusion and streamline permit modification process.

5. Condition IV.C.1

Overflow tank: Can PPG prove that the tank is RCRA empty at all time? Is there a tank gauge to show that the tank is empty? How does PPG know that overflow occur until the hazardous waste reaches a set level which actuate the pump?

If the tank is not regulated under the storage tank, it must be regulated under the closed-vent system. A pressurized closed-vent system must be designed and operated with no detectable emission per 40 CFR§ 264.1033(k)(1). Therefore, it will be included in the permit as part of the closed-vent system.

Wen Huang, P.E.  
(312) 886-6191



O:  
CC:

WMD  
RA/RF LTR. ONLY

→ RCRA  
Permit Br

PPG Industries, Inc.  
One PPG Place Pittsburgh, Pennsylvania 15272 USA

Madelyn A. Reilly  
Senior Attorney  
Law Department  
Direct Dial: (412) 434-2430  
Telecopy: (412) 434-4292

March 24, 1995

**CERTIFIED MAIL/RETURN RECEIPT REQUESTED**

Valdas V. Adamkus  
Regional Administrator  
USEPA Region V  
77 West Jackson Boulevard  
Chicago, IL 60604

RECEIVED  
MAR 30 1995  
U. S. EPA REGION 5  
OFFICE OF REGIONAL ADMINISTRATOR

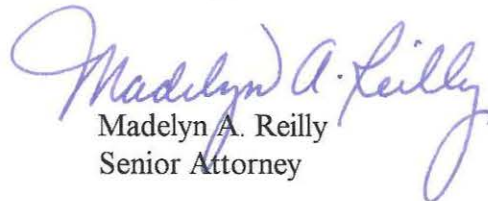
Dear Mr. Adamkus:

Enclosed are the following documents evidencing PPG's demonstration of financial responsibility under the Resource Conservation and Recovery Act (RCRA): (1) letter from PPG's Chief Financial Officer, William H. Hernandez; (2) letter from PPG's independent accounting firm, Deloitte & Touche; (3) PPG's 1994 Annual Report; and (4) PPG's 1994 Form 10-K.

PPG has endeavored to assure that the wording of Mr. Hernandez's letter is in accordance with all applicable requirements. In this regard, please note that the total sum of aggregate sudden and non-sudden liability demonstrated is \$16.5 million. This amount is pursuant to requirements of the State of Louisiana and requirements relating to financial assurance for the remediation of a Superfund site in which PPG is involved. This amount is used in all of PPG's financial responsibility demonstration letters.

Please address all questions on this submission to the undersigned.

Very truly yours,

  
Madelyn A. Reilly  
Senior Attorney

Enclosures

cc: M. Luchok  
M. Broz/Allison Park  
H. Hank  
P. Rooney (Deloitte & Touche)



**PPG Industries, Inc.**

One PPG Place Pittsburgh, Pennsylvania 15272 USA Telephone: (412) 434-2102 Fax: (412) 434-2134

**William H. Hernandez**  
Senior Vice President, Finance

March 24, 1995

Valdas V. Adamkus  
Regional Administrator  
USEPA Region V  
77 West Jackson Blvd.  
Chicago, IL 60604

Dear Mr. Adamkus:

I am the Chief Financial Officer of PPG Industries, Inc., One PPG Place, Pittsburgh, Pennsylvania 15272. This letter is in support of the use of the financial test to demonstrate financial responsibility for liability coverage and closure and/or post-closure care as specified in Subpart H of 40 CFR, Parts 264 and 265.

The firm identified above is the owner or operator of the following facilities for which liability coverage for sudden accidental occurrences is being demonstrated through the financial test specified in Subpart H of 40 CFR Parts 264 and 265:

**EPA ID Number**

**Address**

OHD004198917  
OHD004304689  
OHD004460143  
OHD004347308  
CAD008323438

Barberton, OH  
Circleville, OH  
Cleveland, OH  
Delaware, OH  
Torrance, CA

The firm identified above guarantees through the guarantee specified in Subpart H of 40 CFR Parts 264 and 265, liability coverage for accidental occurrences at the following facilities owned or operated by the following: None. The firm identified above is the direct or higher-tier parent corporation of the owner or operator.

1. The firm identified above owns or operates the following facilities for which financial assurance for closure or post-closure care or liability coverage is demonstrated through the

financial test specified in Subpart H of 40 CFR, Parts 264 and 265. The current closure and/or post-closure cost estimates covered by the test are shown for each facility:

<u>EPA ID Number</u>	<u>Address</u>	<u>Closure Costs</u>	<u>Post-Closure Costs</u>
OHD004198917	Barberton, OH	\$ 653,000	\$0
OHD004304689	Circleville, OH	2,718,300	0
OHD004460143	Cleveland, OH	154,400	0
OHD004347308	Delaware, OH	980,900	0
CAD008323438	Torrance, CA	<u>481,200</u>	<u>0</u>
<b>TOTAL</b>		<b>\$4,987,800</b>	<b>\$0</b>

2. The firm identified above guarantees, through the guarantee specified in Subpart H of 40 CFR, Parts 264 and 265, the closure and post-closure care or liability coverage of the following facilities owned or operated by the guaranteed party. The current cost estimates for the closure or post-closure care so guaranteed are shown for each facility: None.

3. In States where EPA is not administering the financial requirements of Subpart H of 40 CFR, Parts 264 and 265, this firm is demonstrating financial assurance for the closure or post-closure care of the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in Subpart H of 40 CFR, Parts 264 and 265. The current closure and/or post-closure cost estimates covered by such a test are shown for each facility:

<u>EPA ID Number</u>	<u>Address</u>	<u>Closure Costs</u>	<u>Post-Closure Costs</u>
GAD075876623	East Point, GA	274,000	0
LAD008086506	Lake Charles, LA	4,678,027	4,563,341
TXD000356907	LaPorte, TX	93,120	0
WVD004336343	Natium, WV	<u>339,794</u>	<u>0</u>
<b>TOTAL</b>		<b>\$5,384,941</b>	<b>\$4,563,341</b>

4. The firm identified above owns or operates the following hazardous waste management facilities for which financial assurance for closure or, if a disposal facility, post-closure care, is not demonstrated either to EPA or a State through the financial test or any other financial assurance mechanism specified in Subpart H of 40 CFR Parts 264 and 265, or equivalent or substantially equivalent State mechanisms. The current closure and/or post-closure cost estimates not covered by such financial assurance are shown for each facility: None.

5. This firm is the owner or operator of the following UIC facilities for which financial assurance for plugging and abandonment is required under Part 144. The current closure cost estimates [as required by 40 CFR 144.62] are shown for each facility: None.



This firm is required to file a Form 10-K with the Securities and Exchange Commission (SEC) for the latest fiscal year.

The fiscal year of this firm ends on December 31. The figures for the following items marked with an asterisk are derived from this firm's independently audited, year-end financial statements for the latest completed fiscal year, ended December 31, 1994.

<b><u>Alternative 1:</u></b>	<b><u>(in Millions of Dollars)</u></b>
1 Sum of current and post-closure cost estimates (total of all cost estimates listed above).	<u>14.9</u>
2 Amount of annual aggregate liability coverage to be demonstrated.	<u>16.5</u>
3 Sum of lines 1 and 2.	<u>31.4</u>
*4 Total liabilities (if any portion of your closure or post-closure cost estimates is included in your total liabilities, you may deduct that portion from this line and add that amount to lines 5 and 6).	<u>3,336.9</u>
*5 Tangible net worth.	<u>2,302.3</u>
*6 Net worth.	<u>2,557.0</u>
*7 Current assets.	<u>2,168.2</u>
*8 Current liabilities.	<u>1,424.5</u>
9 Net working capital (line 7 minus line 8).	<u>743.7</u>
*10 The sum of net income plus depreciation, depletion, and amortization.	<u>849.8</u>
*11 Total assets in U.S. (required only if less than 90% of assets are located in the U.S.).	<u>3,888.9</u>

March 24, 1995

Page 4

	<u>Yes</u>	<u>No</u>
12 Is line 5 at least \$10 million?	<u>✓</u>	<u>      </u>
13 Is line 5 at least 6 times line 3?	<u>✓</u>	<u>      </u>
14 Is line 9 at least 6 times line 3?	<u>✓</u>	<u>      </u>
*15 Are at least 90% of assets located in the U.S.? If not, complete line 16.	<u>      </u>	<u>✓</u>
16 Is line 11 at least 6 times line 3?	<u>✓</u>	<u>      </u>
17 Is line 4 divided by line 6 less than 2.0?	<u>✓</u>	<u>      </u>
18 Is line 10 divided by line 4 greater than 0.1?	<u>✓</u>	<u>      </u>
19 Is line 7 divided by line 8 greater than 1.5?	<u>✓</u>	<u>      </u>

I hereby certify that the wording of this letter is identical to the wording specified in Section 264.151(g) as such regulations were constituted on the date shown immediately below.

Sincerely,



William H. Hernandez  
Senior Vice President  
Finance

March 24, 1995

**INDEPENDENT AUDITORS' REPORT**

PPG Industries, Inc.:

We have audited, in accordance with generally accepted auditing standards, the balance sheet of PPG Industries, Inc. and subsidiaries as of December 31, 1994, and the related statements of income and cash flows for the year then ended, and have issued our report thereon dated January 19, 1995. This report is based on our knowledge as of that date, obtained in performing our audit of such financial statements, and should be read with that understanding.

At your request, we have performed the procedures enumerated below with respect to the data that the letter from Mr. William H. Hernandez of PPG Industries, Inc. specifies as having been derived from the aforementioned financial statements to the Regional Administrator, Region V, U.S. Environmental Protection Agency dated March 24, 1995. The procedures that we performed are summarized as follows:

1. We compared the amounts included in items 4, 6, 7 and 8 under the caption Alternative I in the letter referred to above with the corresponding amounts in the financial statements referred to in the first paragraph.
2. We recomputed from, or reconciled to, the financial statements referred to in the first paragraph the information included in items 5, 10, 11 and 15 under the caption Alternative I in the letter referred to above.

Because the procedures referred to in the preceding paragraph were not sufficient to constitute an audit made in accordance with generally accepted auditing standards, we do not express an opinion on any of the information or amounts listed under the caption Alternative I in the aforementioned letter. In performing the procedures referred to above, however, no matters came to our attention that caused us to believe that the information or amounts included in items 4, 5, 6, 7, 8, 10, 11 and 15 did not agree with the corresponding amounts in the financial statements referred to in the first paragraph from which they were derived.

This report is intended solely for the information and use of the board of directors of PPG Industries, Inc. and for filing with the Regional Administrator, Region V, U.S. Environmental Protection Agency in accordance with the requirements of the Resource Conservation and Recovery Act and should not be used for any other purpose.

*Deloitte + Touche LLP*

March 24, 1995



PPG Industries, Inc. One PPG Place Pittsburgh, Pennsylvania 15272

O:wmh-  
cc: RF

**Law Department**

Telecopier No.: (412) 434-4292

Writer's Direct Dial No.: (412) 434-2430

March 30, 1990

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED** 494726517

Mr. Valdas V. Adamkus  
Regional Administrator  
U.S. Environmental Protection Agency  
Region V  
230 South Dearborn Street  
Chicago, IL 60604

Dear Mr. Adamkus:

Enclosed are documents evidencing PPG's demonstration of financial responsibility under the Resource Conservation and Recovery Act, including a letter from our Chief Financial Officer, Mr. LeBoeuf, and PPG's independent accounting firm, Deloitte & Touche and a copy of PPG's Form 10-K for 1989.

PPG has endeavored to assure that the wording of the letter is in accordance with all applicable requirements. In this regard, please note that the total sum of aggregate sudden and non-sudden liability demonstrated is \$15 million. This amount is pursuant to requirements of the State of Louisiana and is used in all of PPG's financial responsibility demonstration letters. Please also note that the PPG UIC facilities included in this financial responsibility demonstration are not subject to 40 CFR §142.62. For administrative convenience, however, PPG has elected to include UIC facility closure costs in this letter.

Please address all questions on this submission to the undersigned.

Very truly yours,

*Madelyn A. Reilly*  
Madelyn A. Reilly  
Attorney

RECEIVED

APR 05 1990

MAR/tah  
Enclosure  
cc: C. Ihrig

U. S. EPA REGION 5  
OFFICE OF REGIONAL ADMINISTRATOR

OHD 004 198 917 ORIGINAL  
✓ OHD 004 304 689  
OHD 004 460 143  
OHD 004 347 308  
MID 048 788 749



O: WMD  
C: RF

PPG Industries, Inc. One PPG Place Pittsburgh, Pennsylvania 15272 (412) 434-2076

Raymond W. LeBoeuf  
Vice President  
Finance

March 30, 1990

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Mr. Valdas V. Adamkus  
Regional Administrator  
U.S. Environmental Protection Agency  
Region V  
230 Dearborn Street  
Chicago, IL 60604

RE: Letter from Chief Financial Officer to Demonstrate  
Both Liability Coverage and Assurance of Closure  
or Post-Closure Care

Dear Sir:

I am the Chief Financial Officer of PPG Industries, Inc., One PPG Place, Pittsburgh, Pennsylvania 15272. This letter is in support of the use of the financial test to demonstrate financial responsibility for liability coverage and closure and/or post-closure care as specified in Subpart H of 40 CFR, Parts 264 and 265.

The firm identified above is the owner or operator of the following facilities for which liability coverage for sudden accidental occurrences is being demonstrated through the financial test specified in Subpart H of 40 CFR Parts 264 and 265:

EPA ID Number

Address

OHD004198917  
OHD004304689  
OHD004460143  
OHD004347308  
CAD008323438

Barberton, OH  
Circleville, OH  
Cleveland, OH  
Delaware, OH  
Torrance, CA

The firm identified above guarantees through the guarantee specified in Subpart H of 40 CFR Parts 264 and 265, liability coverage for accidental occurrences at the following facilities owned or operated by the following: None. The firm identified above is the direct or higher-tier parent corporation of the owner or operator.

Mr. Valdas V. Adamkus

Page 2

March 30, 1990

1. The firm identified above owns or operates the following facilities for which financial assurance for closure or post-closure care or liability coverage is demonstrated through the financial test specified in Subpart H of 40 CFR, Parts 264 and 265. The current closure and/or post-closure cost estimates covered by the test are shown for each facility:

<u>EPA ID Number</u>	<u>Address</u>	<u>Closure Costs</u>	<u>Post-Closure Costs</u>
OHD004198917	Barberton, OH	\$ 518,125	\$ 0
OHD004304689	Circleville, OH	2,558,800	0
OHD004460143	Cleveland, OH	221,438	0
OHD004347308	Delaware, OH	204,200	0
CAD008323438	Torrance, CA	<u>143,900</u>	<u>0</u>
TOTAL		\$3,646,463	\$ 0

2. The firm identified above guarantees, through the guarantee specified in Subpart H of 40 CFR, Parts 264 and 265, the closure and post-closure care or liability coverage of the following facilities owned or operated by the guaranteed party. The current cost estimates for the closure or post-closure care so guaranteed are shown for each facility: None.

3. In States where EPA is not administering the financial requirements of Subpart H of 40 CFR, Parts 264 and 265, this firm is demonstrating financial assurance for the closure or post-closure care of the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in Subpart H of 40 CFR, Parts 264 and 265. The current closure and/or post-closure cost estimates covered by such a test are shown for each facility:

<u>EPA ID Number</u>	<u>Address</u>	<u>Closure Costs</u>	<u>Post-Closure Costs</u>
MID048788749	Adrian, MI	\$ 168,000	\$ 0
TXD020305446	Beaumont, TX	16,151	0
DED060074291	Dover, DE	56,900	0
GAD075876623	East Point, GA	292,200	0
TXD008070898	Houston, TX	1,005,600	0
LAD008086506	Lake Charles, LA	7,189,677	2,659,450
TXD000356907	LaPorte, TX	79,713	0
WVD004336343	Natium, WV	<u>75,442</u>	<u>0</u>
TOTAL		\$8,883,683	\$2,659,450

Mr. Valdas V. Adamkus  
Page 3  
March 30, 1990

4. The firm identified above owns or operates the following hazardous waste management facilities for which financial assurance for closure or, if a disposal facility, post-closure care, is not demonstrated either to EPA or a State through the financial test or any other financial assurance mechanism specified in Subpart H of 40 CFR Parts 264 and 265, or equivalent or substantially equivalent State mechanisms. The current closure and/or post-closure cost estimates not covered by such financial assurance are shown for each facility: None.

5. This firm is the owner or operator of the following UIC facilities for which financial assurance for plugging and abandonment is required under Part 144. The current closure cost estimates [as required by 40 CFR 144.62] are shown for each facility:

<u>Class I Injection Wells</u>	Thomas 1-26	\$14,000
	Woodward 1-26	14,000
	Paine 2-26	14,000
<u>Class II (Salt Water Disposal)</u>	Cross 3-5	14,000
<u>Class III Injection Wells</u>	Thomas 2-26	14,000
	Thomas 3-26	<u>14,000</u>
	Total	\$84,000

This firm is required to file a Form 10K with the Securities and Exchange Commission (SEC) for the latest fiscal year.

The fiscal year of this firm ends on December 31. The figures for the following items marked with an asterisk are derived from this firm's independently audited, year-end financial statements for the latest completed fiscal year, ended December 31, 1989.


<u>Alternative 1:</u>	<u>(in Millions)</u>
1. Sum of current closure and post-closure cost estimates (total of all cost estimates listed above).	\$ <u>15.300</u>
2. Amount of annual aggregate liability coverage to be demonstrated.	\$ <u>15.000</u>
3. Sum of lines 1 and 2.	\$ <u>30.300</u>
*4. Total liabilities (if any portion of your closure or post-closure cost estimates is included in your total liabilities, you may deduct that portion from this line and add that amount to lines 5 and 6).	\$ <u>3,363.1</u>

Mr. Valdas V. Adamkus  
Page 4  
March 30, 1990

<u>Alternative 1:</u>	<u>(in Millions)</u>	
*5. Tangible net worth.	<u>\$ 1,919.1</u>	
*6. Net worth.	<u>\$ 2,282.3</u>	
*7. Current assets.	<u>\$ 2,056.3</u>	
*8. Current liabilities.	<u>\$ 1,337.7</u>	
9. Net working capital (line 7 minus line 8).	<u>\$ 718.6</u>	
*10. The sum of net income plus depreciation, depletion, and amortization.	<u>\$ 775.4</u>	
*11. Total assets in U.S. (required only if less than 90% of assets are located in the U.S.).	<u>\$ 4,049.0</u>	<u>-</u>
	<u>YES</u>	<u>NO</u>
12. Is line 5 at least \$10 million?	<u>X</u>	<u>      </u>
13. Is line 5 at least 6 times line 3?	<u>X</u>	<u>      </u>
14. Is line 9 at least 6 times line 3?	<u>X</u>	<u>      </u>
*15. Are at least 90% of assets located in the U.S.? If not, complete line 16.	<u>      </u>	<u>X</u>
16. Is line 11 at least 6 times line 3?	<u>X</u>	<u>      </u>
17. Is line 4 divided by line 6 less than 2.0?	<u>X</u>	<u>      </u>
18. Is line 10 divided by line 4 greater than 0.1?	<u>X</u>	<u>      </u>
19. Is line 7 divided by line 8 greater than 1.5?	<u>X</u>	<u>      </u>

I hereby certify that the wording of this letter is identical to the wording specified in Section 264.151(g) as such regulations were constituted on the date shown immediately below.

Sincerely,

  
R. W. LeBoeuf  
Vice President, Finance  
March 30, 1990

RWL/tah



# Deloitte & Touche



2400 One PPG Place  
Pittsburgh, PA 15222-5401  
Telephone: (412) 263-6900  
Fax: (412) 281-6383

PPG Industries, Inc.  
One PPG Place  
Pittsburgh, PA 15272

March 29, 1990

Dear Sirs:

We have audited, in accordance with generally accepted auditing standards, the balance sheet of PPG Industries, Inc. and consolidated subsidiaries as of December 31, 1989 and the related statements of earnings and of cash flows for the year then ended, and have issued our report thereon dated January 18, 1990. We have not performed any auditing procedures beyond the date of our report on the financial statements; accordingly, this report is based on our knowledge as of that date and should be read with that understanding.

At your request, we have performed the procedures enumerated below with respect to the accompanying letter from Mr. Raymond W. LeBoeuf to the Regional Administrator, Region V, U.S. Environmental Protection Agency dated March 29, 1990. It is understood that this report is solely for filing with the Regional Administrator, Region V, U.S. Environmental Protection Agency in accordance with requirements of the Resource Conservation and Recovery Act, and is not to be used for any other purpose. The procedures that we performed are summarized as follows:

1. We compared the amounts included in items 4, 6, 7, and 8 under the caption Alternative I in the letter referred to above with the corresponding amounts in the financial statements referred to in the first paragraph.
2. We recomputed from, or reconciled to, the financial statements referred to in the first paragraph the information included in items 5, 10, 11, and 15 under the caption Alternative I in the letter referred to above.

Because the procedures referred to in the preceding paragraph were not sufficient to constitute an audit made in accordance with generally accepted auditing standards, we do not express an opinion on any of the information or amounts listed under the caption Alternative I in the aforementioned letter. In performing the procedures referred to above, however, no matters came to our attention that caused us to believe that the information or amounts included in items 4, 5, 6, 7, 8, 10, 11, and 15 should be adjusted.

Yours truly,

*Deloitte & Touche*

044-004-304-689



PPG Industries, Inc. One PPG Place Pittsburgh, Pennsylvania 15272

Law Department  
Writer's Direct Dial No.:

(412) 434-2430

O: WMD-  
CC: RF

April 12, 1989

Mr. Valdas V. Adamkus  
Regional Administrator  
U.S. Environmental Protection Agency  
Region V  
230 Dearborn Street  
Chicago, IL 60604

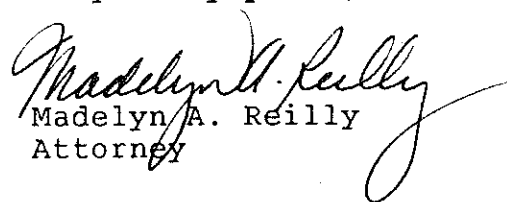
Dear Sir:

By letter dated, March 30, 1989, PPG Industries, Inc. (PPG) submitted documents evidencing PPG's demonstration of financial responsibility as required by the Resource Conservation and Recovery Act.

As part of that submission, closure costs for PPG's LaPorte, Texas facility were reported in error as \$42,600. The correct closure cost amount entry for LaPorte should be \$76,500. This correction does not effect any other entry in the demonstration of financial responsibility and, therefore, only a corrected page 2 has been enclosed for substitution in PPG's original submission.

Please call if you have any questions regarding this correction.

Very truly yours,

  
Madelyn A. Reilly  
Attorney

MAR/tah

Enclosure

RECEIVED

APR 20 1989

U. S. EPA REGION 5  
OFFICE OF REGIONAL ADMINISTRATOR

Mr. Valdas V. Adamkus

Page 2

March 30, 1989

1. The firm identified above owns or operates the following facilities for which financial assurance for closure or post-closure care or liability coverage is demonstrated through the financial test specified in Subpart H of 40 CFR, Parts 264 and 265. The current closure and/or post-closure cost estimates covered by the test are shown for each facility:

<u>EPA ID Number</u>	<u>Address</u>	<u>Closure Costs</u>	<u>Post-Closure Costs</u>
OHD004198917	Barberton, OH	\$ 497,241	0
OHD004304689	Circleville, OH	2,048,200	0
OHD004460143	Cleveland, OH	191,400	0
OHD004347308	Delaware, OH	197,200	0
CAD008323438	Torrance, CA	<u>138,100</u>	<u>0</u>
TOTAL		\$3,072,141	0

2. The firm identified above guarantees, through the guarantee specified in Subpart H of 40 CFR, Parts 264 and 265, the closure and post-closure care or liability coverage of the following facilities owned or operated by the guaranteed party. The current cost estimates for the closure or post-closure care so guaranteed are shown for each facility: None.

3. In States where EPA is not administering the financial requirements of Subpart H of 40 CFR, Parts 264 and 265, this firm is demonstrating financial assurance for the closure or post-closure care of the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in Subpart H of 40 CFR, Parts 264 and 265. The current closure and/or post-closure cost estimates covered by such a test are shown for each facility:

<u>EPA ID Number</u>	<u>Address</u>	<u>Closure Costs</u>	<u>Post-Closure Costs</u>
MID048788749	Adrian, MI	\$ 161,000	\$ 0
TXD020305446	Beaumont, TX	15,500	0
DED060074291	Dover, DE	25,700	0
GAD075876623	East Point, GA	64,800	0
TXD008070898	Houston, TX	1,000,000	0
LAD008086506	Lake Charles, LA	6,899,882	2,552,264
TXD000356907	LaPorte, TX	76,500	0
WVD004336343	Natium, WV	<u>446,700</u>	<u>281,300</u>
TOTAL		\$8,690,082	\$2,833,564



O: WATER  
CC: RF  
FREEMAN

PPG Industries, Inc. One PPG Place Pittsburgh, Pennsylvania 15272

Law Department  
Writer's Direct Dial No.:

(412) 434-2451

March 30, 1988

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Mr. Valdas V. Adamkus  
Regional Administrator  
U.S. Environmental Protection Agency  
Region V  
230 South Dearborn Street  
Chicago, IL 60604

RECEIVED

U.S. ENVIRONMENTAL PROTECTION AGENCY  
WASTEWATER TREATMENT DIVISION  
OFFICE OF THE DIRECTOR

Dear Sir:

Enclosed are documents evidencing PPG's demonstration of financial responsibility under the Resource Conservation and Recovery Act. In addition to the letter from our Chief Financial Officer, Mr. Mitchel, and PPG's independent accounting firm, Deloitte Haskins & Sells, we have enclosed a copy of our Form 10-K.

PPG has endeavored to assure that the wording of the letter is in accordance with all applicable requirements. In this regard, please note that the total sum of aggregate sudden and non-sudden liability demonstrated is \$15 million. This amount is pursuant to requirements of the State of Louisiana and is used in all of PPG's financial responsibility demonstration letters.

Please address all questions on this submission to Susan Kuis  
(412) 434-2451.

Sincerely,

*Susan G. Kuis*

Susan G. Kuis  
Senior Attorney

SGK/tah

Enclosure

1987 FORM 10-K  
ON FILE WITH  
OHA 004 198 917

040 004 304 689



PPG Industries, Inc. One PPG Place Pittsburgh, Pennsylvania 15272 (412) 434-2110

R. H. Mitchel  
Vice President, Finance

March 30, 1988

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Mr. Valdas V. Adamkus  
Regional Administrator  
U.S. Environmental Protection Agency  
Region V  
230 Dearborn Street  
Chicago, IL 60604

RE: Letter from Chief Financial Officer to Demonstrate  
Both Liability Coverage and Assurance of Closure  
or Post-Closure Care

Dear Sir:

I am the Chief Financial Officer of PPG Industries, Inc., One PPG Place, Pittsburgh, Pennsylvania 15272. This letter is in support of the use of the financial test to demonstrate financial responsibility for liability coverage and closure and/or post-closure care as specified in Subpart H of 40 CFR, Parts 264 and 265.

The owner or operator identified above is the owner or operator of the following facilities for which liability coverage is being demonstrated through the financial test specified in Subpart H of 40 CFR Parts 264 and 265:

EPA ID Number

Address

OHD004198917  
OHD004304689  
OHD004460143  
OHD004347308  
CAD008323438

Barberton, OH  
Circleville, OH  
Cleveland, OH  
Delaware, OH  
Torrance, CA

1. The owner or operator identified above owns or operates the following facilities for which financial assurance for closure or post-closure care is demonstrated through the financial test specified in

Subpart H of 40 CFR, Parts 264 and 265. The current closure and/or post-closure cost estimates covered by the test are shown for each facility:

<u>EPA ID Number</u>	<u>Address</u>	<u>Closure Costs</u>	<u>Post-Closure Costs</u>
OHD004198917	Barberton, OH	\$ 252,500	0
OHD004304689	Circleville, OH	2,698,600	0
OHD004460143	Cleveland, OH	157,600	0
OHD004347308	Delaware, OH	180,300	0
CAD008323438	Torrance, CA	<u>133,500</u>	<u>0</u>
	TOTAL	\$3,422,500	0

2. The owner or operator identified above guarantees, through the corporate guarantee specified in Subpart H of 40 CFR, Parts 264 and 265, the closure and post-closure care of the following facilities owned or operated by its subsidiaries. The current cost estimates for the closure or post-closure care so guaranteed are shown for each facility: None.

3. In States where EPA is not administering the financial requirements of Subpart H of 40 CFR, Parts 264 and 265, this owner or operator is demonstrating financial assurance for the closure or post-closure care of the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in Subpart H of 40 CFR, Parts 264 and 265. The current closure and/or post-closure cost estimates covered by such a test are shown for each facility:

<u>EPA ID Number</u>	<u>Address</u>	<u>Closure Costs</u>	<u>Post-Closure Costs</u>
MID048788749	Adrian, MI	\$ 76,600	0
TXD020305446	Beaumont, TX	2,600	0
DED060074291	Dover, DE	24,800	0
GAD075876623	East Point, GA	62,600	0
TXD008070898	Houston, TX	155,800	0
LAD008086506	Lake Charles, LA	6,673,000	\$2,454,100
TXD000356907	LaPorte, TX	41,200	0
WVD004336343	Natrium, WV	<u>614,600</u>	<u>272,000</u>
	TOTAL	\$7,651,200	\$2,726,100

4. The owner or operator identified above owns or operates the following hazardous waste management facilities for which financial assurance for closure or, if a disposal facility, post-closure care, is not demonstrated either to EPA or a State through the financial test or any other financial assurance mechanism specified in Subpart H of 40 CFR Parts 264 and 265, or equivalent or substantially equivalent State mechanisms. The current closure and/or post-closure cost estimates not covered by such financial assurance are shown for each facility: None.

Mr. Valdas V. Adamkus  
Page 3  
March 30, 1988

5. This firm is the owner or operator of the following UIC facilities for which financial assurance for plugging and abandonment is required under Part 144. The current closure cost estimates as required by 40 C.F.R. 144.62 are shown for each facility:

<u>Class I Injection Wells</u>	Thomas 1-26	\$14,000
	Woodward 1-26	14,000
	Paine 2-26	14,000
<u>Class II (Salt Water Disposal)</u>	Cross 3-5	14,000
<u>Class III Injection Wells</u>	Thomas 2-26	14,000
	Thomas 3-26	<u>14,000</u>
	Total	\$84,000

This owner or operator is required to file a Form 10K with the Securities and Exchange Commission (SEC) for the latest fiscal year.

The fiscal year of this owner or operator ends on December 31. The figures for the following items marked with an asterisk are derived from this owner's or operator's independently audited, year-end financial statements for the latest completed fiscal year, ended December 31, 1987.

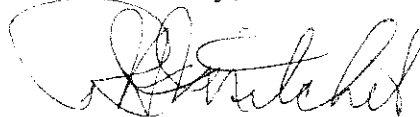
<u>Alternative 1:</u>	<u>(in Millions)</u>
1. Sum of current closure and post-closure cost estimates (total of all cost estimates listed above).	\$ 13.900
2. Amount of annual aggregate liability coverage to be demonstrated.	\$ 15.000
3. Sum of lines 1 and 2.	\$ 28.900
*4. Total liabilities (if any portion of your closure or post-closure cost estimates is included in your total liabilities, you may deduct that portion from this line and add that amount to lines 5 and 6).	\$ 2,944.4
*5. Tangible net worth.	\$ 1,769.8
*6. Net worth.	\$ 2,043.5
*7. Current assets.	\$ 1,835.6

Mr. Valdas V. Adamkus  
Page 4  
March 30, 1988

*8. Current liabilities.	\$	<u>1,274.8</u>
9. Net working capital (line 7 minus line 8).	\$	<u>560.8</u>
*10. The sum of net income plus depreciation, depletion, and amortization.	\$	<u>659.6</u>
*11. Total assets in U.S. (required only if less than 90% of assets are located in the U.S.).	\$	<u>3,342.0</u>
	<u>YES</u>	<u>NO</u>
12. Is line 5 at least \$10 million?	<u>X</u>	<u>      </u>
13. Is line 5 at least 6 times line 3?	<u>X</u>	<u>      </u>
14. Is line 9 at least 6 times line 3?	<u>X</u>	<u>      </u>
*15. Are at least 90% of assets located in the U.S.? If not, complete line 16.	<u>      </u>	<u>X</u>
16. Is line 11 at least 6 times line 3?	<u>X</u>	<u>      </u>
17. Is line 4 divided by line 6 less than 2.0?	<u>X</u>	<u>      </u>
18. Is line 10 divided by line 4 greater than 0.1?	<u>X</u>	<u>      </u>
19. Is line 7 divided by line 8 greater than 1.5?	<u>      </u>	<u>X</u>

I hereby certify that the wording of this letter is identical to the wording specified in Section 264.151(g) as such regulations were constituted on the date shown immediately below.

Sincerely,



R. H. Mitchel  
Vice President, Finance  
March 30, 1988

RHM/tah



# Deloitte Haskins Sells

2400 One PPG Place  
Pittsburgh, Pennsylvania 15222-5401  
(412) 263-6900  
Telex: 4423028

PPG Industries, Inc.  
One PPG Place  
Pittsburgh, PA 15272

March 30, 1988

Dear Sirs:

We have examined the balance sheet of PPG Industries, Inc. and consolidated subsidiaries as of December 31, 1987 and the related statements of earnings and of source and use of funds for the year then ended, and have issued our report thereon dated January 21, 1988. Our examination was made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. We have not performed any auditing procedures beyond the date of our opinion on the financial statements; accordingly, this report is based on our knowledge as of that date and should be read with that understanding.

At your request, we have performed the procedures enumerated below with respect to the accompanying letter from Mr. Robert H. Mitchel to the Regional Administrator, Region V, U.S. Environmental Protection Agency dated March 30, 1988. It is understood that this report is solely for filing with the Regional Administrator, Region V, U.S. Environmental Protection Agency in accordance with requirements of the Resource Conservation and Recovery Act, and is not to be used for any other purpose. The procedures that we performed are summarized as follows:

1. We compared the amounts included in items 4, 6, 7, and 8 under the caption Alternative I in the letter referred to above with the corresponding amounts in the financial statements referred to in the first paragraph.
2. We recomputed from, or reconciled to, the financial statements referred to in the first paragraph the information included in items 5, 10, 11, and 15 under the caption Alternative I in the letter referred to above.

Because the procedures referred to in the preceding paragraph were not sufficient to constitute an examination made in accordance with generally accepted auditing standards, we do not express an opinion on any of the information or amounts listed under the caption Alternative I in the aforementioned letter. In performing the procedures referred to above, however, no matters came to our attention that caused us to believe that the information or amounts included in items 4, 5, 6, 7, 8, 10, 11, and 15 should be adjusted.

Yours truly,

*Deloitte Haskins & Sells*

540.004.304.689



PPG Industries, Inc. One PPG Place Pittsburgh, Pennsylvania 15272

Law Department  
Telecopy No.: (412) 434-4292  
Writer's Direct Dial No.: (412) 434-2406

RECEIVED  
October 23, 1987

Regional Administrator  
U.S. Environmental Protection Agency  
Region V  
230 S. Dearborn Street  
Chicago, IL 60604

NOV 12 1987  
LIC SECTION  
EPA - REGION V

ATTN: Mr. Arthur Moretta

RE: Injection Wells Financial Requirements, PPG  
Industries, Inc. U.S. Potash Solution Mining Facility

Dear Sir:

This letter updates PPG's demonstration of financial responsibility for the above facility and the associated wells. As previously agreed upon between PPG and EPA, this demonstration is being made pursuant to the provision of Subpart F of 40 CFR Part 144 and updates PPG's August 20, 1986 submission, attached as Exhibit A.

Pursuant to a September 30, 1987 phone conversation between Mr. Arthur Moretta of EPA and Mr. Richard Samelson of PPG, no inflation factor is required (i.e., zero inflation) and, accordingly, PPG incorporates its attached 1986 submission with the following qualification:

1. With respect to the Natrium, West Virginia wells discussed in paragraph 3, one of the Brine Production/Standby Wells (No. 4) has been converted to a Waste Mud Injection/Standby Well. The closure costs, however, remain at \$25,000 and there is no change in the total Natrium closure costs.
2. A March 27, 1987 letter to Region V is attached as Exhibit B. This is PPG's 1987 RCRA financial test and is attached to provide more current information on PPG's financial status.

If you have any questions or problems, please contact either myself or Richard Samelson at (412) 434-2841.

Sincerely,

David C. Cannon Jr.  
Senior Counsel

DCC/sla  
Enc.



PPG Industries, Inc. One PPG Place Pittsburgh, Pennsylvania 15272 (412) 434-2110

R. H. Mitchel  
Vice President, Finance

August 20, 1986

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Regional Administrator  
U.S. Environmental Protection Agency  
Region V  
230 S. Dearborn Street  
Chicago, IL 60604

Attn: Mr. Arthur Moretta

Re: Injection Wells Financial Requirements, PPG Industries, Inc.  
U. S. Potash Solution Mining Facility

Dear Sir:

I am the Chief Financial Officer of PPG Industries, Inc. One PPG Place, Pittsburgh, PA 15272. This letter is in support of this firm's use of the financial test to demonstrate financial assurance, as specified in Subpart F of 40 CFR Part 144, and updates PPG's 1985 assurance.

1. This firm is the owner or operator of the following injection wells for which financial assurance for plugging and abandonment is demonstrated through the financial test specified in Subpart F of 40 CFR Part 144. The current plugging and abandonment cost estimate covered by the test is shown for each injection well:

<u>Class I Injection Wells</u>	Thomas 1-26	\$14,000
	Woodward 1-26	\$14,000
	Paine 2-26	\$14,000
<u>Class II (Salt Water Disposal)</u>	Cross 3-5	\$14,000

<u>Class III Injection Wells</u>	Thomas 2-26	\$14,000
	Thomas 3-26	<u>\$14,000</u>
	TOTAL	\$84,000

2. This firm guarantees, through the corporate guarantee specified in Subpart F of 40 CFR Part 144, the plugging and abandonment of the following injection wells owned or operated by subsidiaries of this firm. The current cost estimate for plugging and abandonment so guaranteed is shown for each injection well: None.
3. In States where EPA is not administering the financial requirements of Subpart F of 40 CFR 144, this firm, as owner or operator or guarantor, is demonstrating financial assurance for the plugging and abandonment of the following injection wells through the use of a test equivalent to the financial test specified in Subpart F of 40 CFR 144. The current plugging and abandonment cost estimate covered by such a test is shown for each injection well:

Class III Injection Wells\*/

Lake Charles, Louisiana

Starks Minefield

Brine wells 8, 9, 10, 11, 12, 14 @ \$25,000 = \$150,000

Sulphur Minefield

Brine wells 15, 16, 17, @ \$25,000 = \$ 75,000

Natrum, West Virginia

Current Injection Wells

Well 1 (Class V - Waste Mud) \$ 25,000

Wells 6, 7, 31 @ \$25,000 \$ 75,000

Brine Production/Standby Wells

Wells 2, 4, 5, 8-12, 17, 18, 32-36

@ \$25,000 \$375,000

= \$475,000

Corpus Christi, Texas

Brine Wells 6, 6A, 9, 10, 11 @ \$16,752 = \$ 83,760

4. This firm is the owner or operator of the following injection wells for which financial assurance for plugging and abandonment is not demonstrated either to EPA or a State through the financial test or any other financial assurance mechanism specified in Subpart F of 40

\*/ Unless otherwise indicated.

CFR 144 or equivalent or substantially equivalent State mechanisms.  
The current plugging and abandonment cost estimate not covered by such  
financial assurance is shown for each injection well: None.

This firm is required to file a Form 10K with the Securities and Exchange  
Commission (SEC) for the latest fiscal year.

The fiscal year of this firm ends on December 31. The figures for the  
following items marked with an asterisk are derived from this firm's  
independently audited, year-end financial statements for the latest  
completed fiscal year, ended December 31, 1985.

Alternative 1	(in Millions)
1. (a) Current plugging and abandonment cost	\$ .868
(b) Sum of the company's financial responsibilities under 40 CFR 264 and 265, Sub-part H, currently met using the financial test or corporate guarantee	\$ 26.023
(c) Total of lines a and b	\$ 26.891
*2. Total liabilities (if any portion of the plugging and abandonment cost is included in total liabilities, you may deduct the amount of that portion from this line and add that amount to lines 3 and 4)	\$ 2,378.5
*3. Tangible net worth	\$ 1,612.7
*4. Net worth	\$ 1,705.3
*5. Current assets	\$ 1,370.1
*6. Current liabilities	\$ 823.6
*7. Net working capital (line 5 minus line 6)	\$ 546.5
*8. The sum of net income plus depreciation, depletion and amortization	\$ 521.7
*9. Total assets in U.S. (required only if less than 90% of firm's assets are located in U.S.)	\$ 3,117.0

Regional Administrator  
August 20, 1986  
Page 4

	<u>Yes</u>	<u>No</u>
10. Is line 3 at least \$10 million?	<u>X</u>	<u>      </u>
11. Is line 3 at least 6 times line 1 (c)?	<u>X</u>	<u>      </u>
12. Is line 7 at least 6 times line 1(c)?	<u>X</u>	<u>      </u>
*13. Are at least 90% of firm's assets located in U.S.? If not, complete line 14.	<u>      </u>	<u>X</u>
14. Is line 9 at least 6 times line 1(c)?	<u>X</u>	<u>      </u>
15. Is line 2 divided by line 4 less than 2.0?	<u>X</u>	<u>      </u>
16. Is line 8 divided by line 2 greater than 0.1?	<u>X</u>	<u>      </u>
17. Is line 5 divided by line 6 greater than 1.5?	<u>X</u>	<u>      </u>

I hereby certify that the wording of this letter is identical to the wording specified in 40 CFR 144.70(f) as such regulations were constituted on the date shown immediately below.

Sincerely,



R. H. Mitchel  
Vice President, Finance  
August 20, 1986

RHM:sdh

# Deloitte Haskins+Sells

2400 One PPG Place  
Pittsburgh, Pennsylvania 15222-5401  
(412) 263-6900  
Telex: 4423028

PPG Industries, Inc.  
One PPG Place  
Pittsburgh, PA 15272

August 20, 1986

Dear Sirs:

We have examined the balance sheet of PPG Industries, Inc. and consolidated subsidiaries as of December 31, 1985 and the related statements of earnings and of source and use of funds for the year then ended, and have issued our report thereon dated January 22, 1986. Our examination was made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. We have not performed any substantive auditing procedures beyond the date of our opinion on the financial statements; accordingly, this report is based on our knowledge as of that date and should be read with that understanding.

At your request, we have performed the procedures enumerated below with respect to the accompanying letter from Mr. Robert H. Mitchel to the Regional Administrator, Region V, Environmental Protection Agency dated August 20, 1986. It is understood that this report is solely for filing with the Regional Administrator, Region V, Environmental Protection Agency in accordance with requirements of the Safe Drinking Water Act, and is not to be used for any other purpose. The procedures that we performed are summarized as follows:

1. We compared the amounts included in items 2, 4, 5, 6 and 9 under the caption Alternative I in the letter referred to above with the corresponding amounts in the financial statements referred to in the first paragraph.
2. We recomputed from, or reconciled to, the financial statements referred to in the first paragraph the information included in items 3, 7, 8 and 13 under the caption Alternative I in the letter referred to above.

Because the procedures referred to in the preceding paragraph were not sufficient to constitute an examination made in accordance with generally accepted auditing standards, we do not express an opinion on any of the information or amounts listed under the caption Alternative I in the aforementioned letter. In performing the procedures referred to above, however, no matters came to our attention that caused us to believe that the information or amounts included in items 2, 3, 4, 5, 6, 7, 8, 9 and 13 should be adjusted.

Yours truly,

*Deloitte Haskins+Sells*



PPG Industries, Inc. One PPG Place Pittsburgh, Pennsylvania 15272

Law Department  
Writer's Direct Dial No.: (412) 434-2451

March 27, 1987

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Mr. Valdas V. Adamkus  
Regional Administrator  
U.S. Environmental Protection Agency  
Region V  
230 South Dearborn Street  
Chicago, IL 60604

Dear Sir:

Enclosed are documents evidencing PPG's demonstration of financial responsibility under the Resource Conservation and Recovery Act. In addition to the letter from our Chief Financial Officer, Mr. Mitchel, and PPG's independent accounting firm, Deloitte Haskins & Sells, we have enclosed a copy of our Form 10-K.

PPG has endeavored to assure that the wording of the letter is in accordance with all applicable requirements. In this regard, please note that the total sum of aggregate sudden and non-sudden liability demonstrated is \$15 million. This amount is pursuant to requirements of the State of Louisiana and is used in all of PPG's financial responsibility demonstration letters.

Please address all questions on this submission to Susan Kuis  
(412) 434-2451.

Sincerely,

Susan G. Kuis  
Attorney

SGK/tah

Enclosure



Mr. Valdas V. Adamkus



PPG Industries, Inc. One PPG Place Pittsburgh, Pennsylvania 15272

Law Department  
Writer's Direct Dial No.:

March 27, 1987

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Mr. Valdas V. Adamkus  
Regional Administrator  
U.S. Environmental Protection Agency  
Region V  
230 Dearborn Street  
Chicago, IL 60604

RE: Letter from Chief Financial Officer to Demonstrate  
Both Liability Coverage and Assurance of Closure  
or Post-Closure Care

Dear Sir:

I am the Chief Financial Officer of PPG Industries, Inc., One PPG Place, Pittsburgh, Pennsylvania 15272. This letter is in support of the use of the financial test to demonstrate financial responsibility for liability coverage and closure and/or post-closure care as specified in Subpart H of 40 CFR, Parts 264 and 265.

The owner or operator identified above is the owner or operator of the following facilities for which liability coverage is being demonstrated through the financial test specified in Subpart H of 40 CFR Parts 264 and 265:

EPA ID Number

Address

OHD004198917  
OHD004304689  
OHD004460143  
OHD004347308  
CAD008323438

Barberton, OH  
Circleville, OH  
Cleveland, OH  
Delaware, OH  
Torrance, CA

1. The owner or operator identified above owns or operates the following facilities for which financial assurance for closure or post-closure care is demonstrated through the financial test specified in

Mr. Valdas V. Adamkus  
Page 3  
March 27, 1987

This owner or operator is required to file a Form 10K with the Securities and Exchange Commission (SEC) for the latest fiscal year.

The fiscal year of this owner or operator ends on December 31. The figures for the following items marked with an asterisk are derived from this owner's or operator's independently audited, year-end financial statements for the latest completed fiscal year, ended December 31, 1986.

<u>Alternative 1:</u>	<u>(in Millions)</u>	
1. Sum of current closure and post-closure cost estimates (total of all cost estimates listed above).	\$	<u>8.583</u>
2. Amount of annual aggregate liability coverage to be demonstrated.	\$	<u>15.000</u>
3. Sum of lines 1 and 2.	\$	<u>23.583</u>
*4. Total liabilities (if any portion of your closure or post-closure cost estimates is included in your total liabilities, you may deduct that portion from this line and add that amount to lines 5 and 6).	\$	<u>2,663.6</u>
*5. Tangible net worth.	\$	<u>1,769.4</u>
*6. Net worth.	\$	<u>1,977.8</u>
*7. Current assets.	\$	<u>1,615.9</u>
*8. Current liabilities.	\$	<u>975.7</u>
9. Net working capital (line 7 minus line 8).	\$	<u>640.2</u>
*10. The sum of net income plus depreciation, depletion, and amortization.	\$	<u>566.9</u>
*11. Total assets in U.S. (required only if less than 90% of assets are located in the U.S.).	\$	<u>3,371.0</u>
	<u>YES</u>	<u>NO</u>
12. Is line 5 at least \$10 million?	<u>X</u>	<u>   </u>
13. Is line 5 at least 6 times line 3?	<u>X</u>	<u>   </u>
14. Is line 9 at least 6 times line 3?	<u>X</u>	<u>   </u>

Mr. Valdas V. Adamkus  
Page 4  
March 27, 1987

	<u>YES</u>	<u>NO</u>
*15. Are at least 90% of assets located in the U.S.? If not, complete line 16.	_____	<u>X</u>
16. Is line 11 at least 6 times line 3?	<u>X</u>	_____
17. Is line 4 divided by line 6 less than 2.0?	<u>X</u>	_____
18. Is line 10 divided by line 4 greater than 0.1?	<u>X</u>	_____
19. Is line 7 divided by line 8 greater than 1.5?	<u>X</u>	_____

I hereby certify that the wording of this letter is identical to the wording specified in Section 264.151(g) as such regulations were constituted on the date shown immediately below.

Sincerely,



R. H. Mitchel  
Vice President, Finance  
March 27, 1987

RHM/tah

# Deloitte Haskins+Sells

2400 One PPG Place  
Pittsburgh, Pennsylvania 15222  
(412) 263-6900  
Telex 4423028

PPG Industries, Inc.  
One PPG Place  
Pittsburgh, PA 15272

March 27, 1987

Dear Sirs:

We have examined the balance sheet of PPG Industries, Inc. and consolidated subsidiaries as of December 31, 1986 and the related statements of earnings and of source and use of funds for the year then ended, and have issued our report thereon dated January 22, 1987. Our examination was made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. We have not performed any auditing procedures beyond the date of our opinion on the financial statements; accordingly, this report is based on our knowledge as of that date and should be read with that understanding.

At your request, we have performed the procedures enumerated below with respect to the accompanying letter from Mr. Robert H. Mitchel to the Regional Administrator, Region V, U.S. Environmental Protection Agency, dated March 27, 1987. It is understood that this report is solely for filing with the Regional Administrator, Region V, U.S. Environmental Protection Agency, in accordance with requirements of the Resource Conservation and Recovery Act, and is not to be used for any other purpose. The procedures that we performed are summarized as follows:

1. We compared the amounts included in items 4, 6, 7, 8 and 11 under the caption Alternative I in the letter referred to above with the corresponding amounts in the financial statements referred to in the first paragraph.
2. We recomputed from, or reconciled to, the financial statements referred to in the first paragraph the information included in items 5, 10 and 15 under the caption Alternative I in the letter referred to above.

Because the procedures referred to in the preceding paragraph were not sufficient to constitute an examination made in accordance with generally accepted auditing standards, we do not express an opinion on any of the information or amounts listed under the caption Alternative I in the aforementioned letter. In performing the procedures referred to above, however, no matters came to our attention that caused us to believe that the information or amounts included in items 4, 5, 6, 7, 8, 10, 11 and 15 should be adjusted.

Yours truly,

*Deloitte Haskins & Sells*



PPG Industries, Inc. One PPG Place Pittsburgh, Pennsylvania 15272

**Law Department**

Writer's Direct Dial No.: (412) 434-2451

04D 004 304 689

APR 09 1987

March 27, 1987

RECEIVED

REGION V  
FMS

APR 2 1987

RECEIVED

SOLID WASTE BRANCH  
U.S. EPA, REGION V

APR 1 1987

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Mr. Valdas V. Adamkus  
Regional Administrator  
U.S. Environmental Protection Agency  
Region V  
230 South Dearborn Street  
Chicago, IL 60604

Dear Sir:

Enclosed are documents evidencing PPG's demonstration of financial responsibility under the Resource Conservation and Recovery Act. In addition to the letter from our Chief Financial Officer, Mr. Mitchell, and PPG's independent accounting firm, Deloitte Haskins & Sells, we have enclosed a copy of our Form 10-K.

PPG has endeavored to assure that the wording of the letter is in accordance with all applicable requirements. In this regard, please note that the total sum of aggregate sudden and non-sudden liability demonstrated is \$15 million. This amount is pursuant to requirements of the State of Louisiana and is used in all of PPG's financial responsibility demonstration letters.

Please address all questions on this submission to Susan Kuis  
(412) 434-2451.

Sincerely,

*Susan G. Kuis*

Susan G. Kuis  
Attorney

O. WMD  
CC: RF (CERT #P 419 398 260)

SGK/tah

Enclosure

COPY 2

# Deloitte Haskins + Sells

2400 One PPG Place  
Pittsburgh, Pennsylvania 15222  
(412) 263-6900  
Telex 4423028

PPG Industries, Inc.  
One PPG Place  
Pittsburgh, PA 15272

March 27, 1987

Dear Sirs:

We have examined the balance sheet of PPG Industries, Inc. and consolidated subsidiaries as of December 31, 1986 and the related statements of earnings and of source and use of funds for the year then ended, and have issued our report thereon dated January 22, 1987. Our examination was made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. We have not performed any auditing procedures beyond the date of our opinion on the financial statements; accordingly, this report is based on our knowledge as of that date and should be read with that understanding.

At your request, we have performed the procedures enumerated below with respect to the accompanying letter from Mr. Robert H. Mitchel to the Regional Administrator, Region V, U.S. Environmental Protection Agency, dated March 27, 1987. It is understood that this report is solely for filing with the Regional Administrator, Region V, U.S. Environmental Protection Agency, in accordance with requirements of the Resource Conservation and Recovery Act, and is not to be used for any other purpose. The procedures that we performed are summarized as follows:

1. We compared the amounts included in items 4, 6, 7, 8 and 11 under the caption Alternative I in the letter referred to above with the corresponding amounts in the financial statements referred to in the first paragraph.
2. We recomputed from, or reconciled to, the financial statements referred to in the first paragraph the information included in items 5, 10 and 15 under the caption Alternative I in the letter referred to above.

Because the procedures referred to in the preceding paragraph were not sufficient to constitute an examination made in accordance with generally accepted auditing standards, we do not express an opinion on any of the information or amounts listed under the caption Alternative I in the aforementioned letter. In performing the procedures referred to above, however, no matters came to our attention that caused us to believe that the information or amounts included in items 4, 5, 6, 7, 8, 10, 11 and 15 should be adjusted.

Yours truly,

*Deloitte Haskins + Sells*



PPG Industries, Inc. One PPG Place Pittsburgh, Pennsylvania 15272

Law Department  
Writer's Direct Dial No.:

March 27, 1987

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Mr. Valdas V. Adamkus  
Regional Administrator  
U.S. Environmental Protection Agency  
Region V  
230 Dearborn Street  
Chicago, IL 60604

RE: Letter from Chief Financial Officer to Demonstrate  
Both Liability Coverage and Assurance of Closure  
or Post-Closure Care

Dear Sir:

I am the Chief Financial Officer of PPG Industries, Inc., One PPG Place, Pittsburgh, Pennsylvania 15272. This letter is in support of the use of the financial test to demonstrate financial responsibility for liability coverage and closure and/or post-closure care as specified in Subpart H of 40 CFR, Parts 264 and 265.

The owner or operator identified above is the owner or operator of the following facilities for which liability coverage is being demonstrated through the financial test specified in Subpart H of 40 CFR Parts 264 and 265:

EPA ID Number

Address

OHD004198917  
OHD004304689 Part B  
OHD004460143  
OHD004347308 Part B  
CAD008323438

Barberton, OH  
Circleville, OH  
Cleveland, OH  
Delaware, OH  
Torrance, CA

1. The owner or operator identified above owns or operates the following facilities for which financial assurance for closure or post-closure care is demonstrated through the financial test specified in

COPY 2

Subpart H of 40 CFR, Parts 264 and 265. The current closure and/or post-closure cost estimates covered by the test are shown for each facility:

<u>EPA ID Number</u>	<u>Address</u>	<u>Closure Costs</u>	<u>Post-Closure Costs</u>
OHD004198917	Barberton, OH	\$ 161,400	0
OHD004304689	Circleville, OH	718,000	0
OHD004460143	Cleveland, OH	153,200	0
OHD004347308	Delaware, OH	83,000	0
CAD008323438	Torrance, CA	<u>218,500</u>	<u>0</u>
	TOTAL	\$1,334,100	0

2. The owner or operator identified above guarantees, through the corporate guarantee specified in Subpart H of 40 CFR, Parts 264 and 265, the closure and post-closure care of the following facilities owned or operated by its subsidiaries. The current cost estimates for the closure or post-closure care so guaranteed are shown for each facility: None.

3. In States where EPA is not administering the financial requirements of Subpart H of 40 CFR, Parts 264 and 265, this owner or operator is demonstrating financial assurance for the closure or post-closure care of the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in Subpart H of 40 CFR, Parts 264 and 265. The current closure and/or post-closure cost estimates covered by such a test are shown for each facility:

<u>EPA ID Number</u>	<u>Address</u>	<u>Closure Costs</u>	<u>Post-Closure Costs</u>
MID048788749	Adrian, MI	\$ 74,500	0
TXD020305446	Beaumont, TX	2,500	0
DED060074291	Dover, DE	23,100	0
GAD075876623	East Point, GA	60,200	0
TXD008070898	Houston, TX	57,200	0
LAD008086506	Lake Charles, LA	5,483,400	\$646,800
TXD000356907	LaPorte, TX	40,000	0
WVD004336343	Natrium, WV	<u>597,200</u>	<u>264,300</u>
	TOTAL	\$6,338,100	\$911,100

4. The owner or operator identified above owns or operates the following hazardous waste management facilities for which financial assurance for closure or, if a disposal facility, post-closure care, is not demonstrated either to EPA or a State through the financial test or any other financial assurance mechanism specified in Subpart H of 40 CFR, Parts 264 and 265 or equivalent State mechanisms. The current closure and/or post-closure cost estimates not covered by such financial assurance are shown for each facility: None.



Mr. Valdas V. Adamkus  
Page 3  
March 27, 1987

This owner or operator is required to file a Form 10K with the Securities and Exchange Commission (SEC) for the latest fiscal year.

The fiscal year of this owner or operator ends on December 31. The figures for the following items marked with an asterisk are derived from this owner's or operator's independently audited, year-end financial statements for the latest completed fiscal year, ended December 31, 1986.

<u>Alternative 1:</u>	<u>(in Millions)</u>	
1. Sum of current closure and post-closure cost estimates (total of all cost estimates listed above).	\$	<u>8.583</u>
2. Amount of annual aggregate liability coverage to be demonstrated.	\$	<u>15.000</u>
3. Sum of lines 1 and 2.	\$	<u>23.583</u>
*4. Total liabilities (if any portion of your closure or post-closure cost estimates is included in your total liabilities, you may deduct that portion from this line and add that amount to lines 5 and 6).	\$	<u>2,663.6</u>
*5. Tangible net worth.	\$	<u>1,769.4</u>
*6. Net worth.	\$	<u>1,977.8</u>
*7. Current assets.	\$	<u>1,615.9</u>
*8. Current liabilities.	\$	<u>975.7</u>
9. Net working capital (line 7 minus line 8).	\$	<u>640.2</u>
*10. The sum of net income plus depreciation, depletion, and amortization.	\$	<u>566.9</u>
*11. Total assets in U.S. (required only if less than 90% of assets are located in the U.S.).	\$	<u>3,371.0</u>
	<u>YES</u>	<u>NO</u>
12. Is line 5 at least \$10 million?	<u>X</u>	<u>    </u>
13. Is line 5 at least 6 times line 3?	<u>X</u>	<u>    </u>
14. Is line 9 at least 6 times line 3?	<u>X</u>	<u>    </u>

Mr. Valdas V. Adamkus  
Page 4  
March 27, 1987

	<u>YES</u>	<u>NO</u>
*15. Are at least 90% of assets located in the U.S.? If not, complete line 16.	<u>      </u>	<u>  X  </u>
16. Is line 11 at least 6 times line 3?	<u>  X  </u>	<u>      </u>
17. Is line 4 divided by line 6 less than 2.0?	<u>  X  </u>	<u>      </u>
18. Is line 10 divided by line 4 greater than 0.1?	<u>  X  </u>	<u>      </u>
19. Is line 7 divided by line 8 greater than 1.5?	<u>  X  </u>	<u>      </u>

I hereby certify that the wording of this letter is identical to the wording specified in Section 264.151(g) as such regulations were constituted on the date shown immediately below.

Sincerely,



R. H. Mitchel  
Vice President, Finance  
March 27, 1987

RHM/tah

RE

PPG Industries, Inc. One PPG Place Pittsburgh, Pennsylvania 15272 (412) 434-2110

ADDITIONAL INFORMATION  
IS FILED WITH  
MID 048 788 749

R. H. Mitchell  
Vice President, Finance

March 27, 1985

RECEIVED

Regional Administrator, Region V  
Environmental Protection Agency  
230 South Dearborn Street  
Chicago, IL 60604

Re: Letter from Chief Financial Officer to Demonstrate  
Both Liability Coverage and Assurance of Closure  
or Post-Closure Care

Dear Sir:

I am the Chief Financial Officer of PPG Industries, Inc., One PPG Place, Pittsburgh, Pennsylvania 15272. This letter is in support of the use of the financial test to demonstrate financial responsibility for liability coverage and closure and/or post-closure care as specified in Subpart H of 40 CFR Parts 264 and 265.

The owner or operator identified above is the owner or operator of the following facilities for which liability coverage is being demonstrated through the financial test specified in Subpart H of 40 CFR Parts 264 and 265:

EPA ID Number

Address

MID048788749

Adrian, MI

1. The owner or operator identified above owns or operates the following facilities for which financial assurance for closure or post-closure care is demonstrated through the financial test specified in Subpart H of 40 CFR Parts 264 and 265. The current closure and/or post-closure cost estimates covered by the test are shown for each facility:



Goh Z

PPG Industries, Inc. One PPG Place Pittsburgh, Pennsylvania 15272 (412) 434-3703

Paul M. King  
Director  
Environmental Affairs  
Environment, Health & Safety Department

MID - 048288749  
OHD - 004304689 - Major  
OHD - 004347308 -

March 26, 1984

Regional Administrator, Region V  
Environmental Protection Agency  
230 South Dearborn Street  
Chicago, IL 60604

RECEIVED  
APR 02 1984

WASTE MANAGEMENT  
BRANCH

Dear Sir:

Enclosed is PPG's financial responsibility assurance submission as required under state and federal hazardous waste regulations. If there are any questions on this submission, please contact me at the above number.

Sincerely yours,

Paul M. King

PMK/lm  
Enclosure

1883  
1983



PPG Industries, Inc. One PPG Place Pittsburgh, Pennsylvania 15272 (412) 434-2110

**R. H. Mitchel**  
Vice President, Finance

March 26, 1984

Regional Administrator, Region V  
Environmental Protection Agency  
230 South Dearborn Street  
Chicago, IL 60604

Re: Letter from Chief Financial Officer to Demonstrate both  
Liability Coverage and Assurance of Closure or Post-Closure Care

Dear Sir:

I am the Chief Financial Officer of PPG Industries, Inc., One PPG Place, Pittsburgh, Pennsylvania 15272. This letter is in support of the use of the financial test to demonstrate financial responsibility for liability coverage and closure and/or post-closure care as specified in Subpart H of 40 CFR, Parts 264 and 265.

The owner or operator identified above is the owner or operator of the following facilities for which liability coverage is being demonstrated through the financial test specified in Subpart H of 40 CFR Parts 264 and 265:

EPA ID Number

Address

MID048788749

Adrian, MI

WVD004336343

Natrium, WV

1. The owner or operator identified above owns or operates the following facilities for which financial assurance for closure or post-closure care is demonstrated through the financial test specified in Subpart H of 40 CFR, Parts 264 and 265. The current closure and/or post-closure cost estimates covered by the test are shown for each facility:

<u>EPA ID Number</u>	<u>Address</u>	<u>Closure Costs</u>	<u>Post-Closure Costs</u>
MID048288749	Adrian, MI	\$ 14,700	0
WVD00433634	Natrium, WV	713,100	0
		TOTAL = \$727,800	

2. The owner or operator identified above guarantees, through the corporate guarantee specified in Subpart H of 40 CFR, Parts 264 and 265, the closure and post-closure care of the following facilities owned or operated by its subsidiaries. The current cost estimates for the closure or post-closure care so guaranteed are shown for each facility: None

3. In States where EPA is not administering the financial requirements of Subpart H of 40 CFR, Parts 264 and 265, this owner or operator is demonstrating financial assurance for the closure or post-closure care of the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in Subpart H of 40 CFR, Parts 264 and 265. The current closure and/or post-closure cost estimates covered by such a test are shown for each facility:

<u>EPA ID Number</u>	<u>Address</u>	<u>Closure Costs</u>	<u>Post-Closure Costs</u>
OHD004198917	Barberton, OH	\$ 516,100	0
TXD020805446	Beaumont, TX	3,633,200	0
OHD004304689	Circleville, OH	646,000	0
OHD004460143	Cleveland, OH	110,000	0
OHD004347308	Delaware, OH	152,300	0
DED060074291	Dover, DE	20,800	0
GAD075876623	East Point, GA	68,500	0
TXD008070898	Houston, TX	51,700	0
LAD008086506	Lake Charles, LA	628,900	0
TXD000356907	LaPorte, TX	37,400	0
CAD008323438	Torrance, CA	75,000	0
TXD078552932	Wichita Falls, TX	25,000	0
		TOTAL = \$5,964,900	

4. The owner or operator identified above owns or operates the following hazardous waste management facilities for which financial assurance for closure or, if a disposal facility, post-closure care, is not demonstrated either to EPA or a State through the financial test or any other financial assurance mechanism specified in Subpart H of 40 CFR, Parts 264 and 265 or equivalent or substantially equivalent State mechanisms. The current closure and/or post-closure cost estimates not covered by such financial assurance are shown for each facility:

<u>EPA ID Number</u>	<u>Address</u>	<u>Closure Costs</u>	<u>Post-Closure Costs</u>
PRD000692715	Guayanilla, PR	\$1,325,400	0
PAD004336319	Springdale, PA (Plant)	144,000	0
PAD000650366	Springdale, PA (R&D)	62,300	0
		TOTAL = \$1,531,700	

This owner or operator is required to file a Form 10K with the Securities and Exchange Commission (SEC) for the latest fiscal year.

The fiscal year of this owner or operator ends on December 31. The figures for the following items marked with an asterisk are derived from this owner's or operator's independently audited, year-end financial statements for the latest completed fiscal year, ended December 31, 1983.

<u>Alternative 1:</u>	<u>(in Millions)</u>
1. Sum of current closure and post-closure cost estimates (total of all cost estimates listed above)	\$ <u>8.224</u>
2. Amount of annual aggregate liability coverage to be demonstrated .	\$ <u>8.000</u>
3. Sum of lines 1 and 2	\$ <u>16.224</u>
*4. Total liabilities (if any portion of your closure or post-closure cost estimates is included in your total liabilities, you may deduct that portion from this line and add that amount to lines 5 and 6)	\$ <u>1,768.9</u>
*5. Tangible net worth	\$ <u>1,760.1</u>
*6. Net worth	\$ <u>1,845.8</u>
*7. Current assets	\$ <u>1,225.2</u>
*8. Current liabilities	\$ <u>738.4</u>
9. Net working capital (line 7 minus line 8)	\$ <u>486.8</u>

Regional Administrator, Region V  
Page -4-  
March 26, 1984

*10.	The sum of net income plus depreciation, depletion, and amortization.	\$	<u>420.8</u>
*11.	Total assets in U.S. (required only if less than 90% of assets are located in the U.S.)	\$	<u>2,797.0</u>
		<u>Yes</u>	<u>No</u>
12.	Is line 5 at least \$10 million?	<u>X</u>	<u>      </u>
13.	Is line 5 at least 6 times line 3?	<u>X</u>	<u>      </u>
14.	Is line 9 at least 6 times line 3?	<u>X</u>	<u>      </u>
*15.	Are at least 90% of assets located in the U.S.? If not, complete line 16.	<u>      </u>	<u>X</u>
16.	Is line 11 at least 6 times line 3?	<u>X</u>	<u>      </u>
17.	Is line 4 divided by line 6 less than 2.0?	<u>X</u>	<u>      </u>
18.	Is line 10 divided by line 4 greater than 0.1?	<u>X</u>	<u>      </u>
19.	Is line 7 divided by line 8 greater than 1.5?	<u>X</u>	<u>      </u>

I hereby certify that the wording of this letter is identical to the wording specified in 40 CFR 264.151(g) as such regulations were constituted on the date shown immediately below.

Sincerely yours,



R. H. Mitchel  
Vice President, Finance  
March 26, 1984

/lm



# Deloitte Haskins+Sells

800 Two Gateway Center  
Pittsburgh, Pennsylvania 15222  
(412) 263-6900  
Telex 4423028

PPG Industries, Inc.  
One PPG Place  
Pittsburgh, PA 15272

March 26, 1984

Dear Sirs:

We have examined the balance sheet of PPG Industries, Inc. and consolidated subsidiaries as of December 31, 1983 and the related statements of earnings and of source and use of funds for the year then ended, and have issued our report thereon dated January 25, 1984. Our examination was made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. We have not performed any auditing procedures beyond the date of our opinion on the financial statements; accordingly, this report is based on our knowledge as of that date and should be read with that understanding.

At your request, we have performed the procedures enumerated below with respect to the accompanying letter from Mr. Robert H. Mitchel to the Regional Administrator, Region V, Environmental Protection Agency dated March 26, 1984. It is understood that this report is solely for filing with the Regional Administrator, Region V, Environmental Protection Agency and is not to be used for any other purposes. The procedures that we performed are summarized as follows:

1. We compared the amounts included in items 4, 6, 7, 8, and 11 under the caption Alternative I in the letter referred to above with the corresponding amounts in the financial statements referred to in the first paragraph.
2. We recomputed from, or reconciled to, the financial statements referred to in the first paragraph the information included in items 5, 10, and 15 under the caption Alternative I in the letter referred to above.

Because the procedures referred to in the preceding paragraph were not sufficient to constitute an examination made in accordance with generally accepted auditing standards, we do not express an opinion on any of the information or amounts listed under the caption Alternative I in the aforementioned letter. In performing the procedures referred to above, however, no matters came to our attention that caused us to believe that the information or amounts included in items 4, 5, 6, 7, 8, 10, 11, and 15 should be adjusted.

Yours truly,

*Deloitte Haskins+Sells*